ied
A

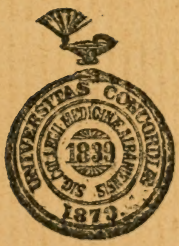
Vol. XXXVII No. 2

iological
Medical
rials

ALBANY MEDICAL ANNALS

Journal of the Alumni Association of the
Albany Medical College

FEBRUARY, 1916



Ασφαλὲς καὶ ἔμπεδον ἔστω το σὸν ἔδος. Ἐκ σκότου μὲν
ἔξαγε φάος, ἐκ δὲ πάθους ἀναψυχήν.

STORAGE

ALBANY MEDICAL ANNALS

Journal of the Alumni Association of the Albany Medical College

ALUMNI COMMITTEE

A. VANDER VEER, M. D. W. G. TUCKER, M. D. ANDREW MACFARLANE, M. D.

EDITED BY

J. MONTGOMERY MOSHER, M. D.

Published on the First of every month
Subscription Price, Two dollars per annum in advance
Advertising Rates given on Application

Address all communications to ALBANY MEDICAL ANNALS,
170 Washington Avenue, Albany, N. Y.

Entered as Second Class matter at the Post Office, Albany, N. Y.

Vol. XXXVII, No. 2 FEBRUARY, 1916

CONTENTS

ORIGINAL COMMUNICATIONS

The Administration of the Carbonic Acid Brine Baths (Nauheim Baths), By JAMES HENRY HONAN, M. D. 51
The Prevention of Feeble-Mindedness. By MARTIN W. BARR, M. D. 58
The Present Standard of the Care and Treatment in State Hospitals, By WILLIAM MABON, M. D. 66

EDITORIAL

The Teaching of Physiology 77

PUBLIC HEALTH

Department of Health, Albany, N. Y.: Abstract of Vital Statistics, December, 1915 79

MEDICAL NEWS

Albany Guild for the Care of the Sick 84
Medical Society of the County of Albany 85
Medical Society of the County of Schenectady 85
Alumni Association of the Albany Medical College 85
College Notes 85
The Critic and Guide 86
Association of Military Surgeons of the United States 86
New York Health Almanac 86
The American Medical Association Elections Declared Illegal 86
Appropriation for Tuberculosis Hospital 86
Guarding Against Typhus 86
Decrease in Medical Books 87
Memorial to Trudeau 87
The De Roaldes Prize 87
Cancer Research 87
Organization of Indian Service Physicians 87
Belgian Scholarship Committee 88
Typhus in Mexico 88
Tuberculosis Patients and the Law 88
Compensation for Federal Employees 88
The American Ambulance 89
Tooth Paste Tax 89
Governor Approves Health Budget 89
United States Public Health Service 89
Sanitation and Poverty 92
Work of American Ambulance 92
Personals 92
Died 92

IN MEMORIAM

WALTER B. PALMER, M. D. 92
EUGENE J. GALLAGHER, M. D. 93

CURRENT MEDICAL LITERATURE

REVIEWS AND NOTICES OF BOOKS

Nervous and Mental Diseases, By ARCHIBALD CHURCH, M. D. and FREDERICK PETERSON, M. D. 93
Differential Diagnosis. By RICHARD C. CABOT, M. D. 94
A Manual of the Practice of Medicine. By A. A. STEVENS, A. M., M. D. 95
Alveolodental Pyorrhoea. By CHARLES C. BASS, M. D. and FOSTER M. JOHNS, M. D. 95
Cancer: Its Cause and Treatment. By L. DUNCAN BULKLEY, A. M., M. D. 95
The Principles of Pathologic Histology. By FRANK B. MALLORY, M. D. 96
Pathological Technique. By F. B. MALLORY, M. D. and J. H. WRIGHT, M. D. 96
Pyelography. By WILLIAM F. BRAASCH, M. D. 97
What to Eat and Why. By G. CARROLL SMITH, M. D. 97
Diseases of the Gastro-Intestinal Tract. By SAMUEL GOODWIN GANT, M. D., LL. D. 98
A Text-Book of Pathology. By ALFRED STENGEL, M. D. and HERBERT FOX, M. D. 98
Tuberculosis. By THOMAS CRAWFORD GALCREATH 98
A Synopsis of Medical Treatment. By GEORGE CHEEVER SHATTUCK, M. D. 99
Potter's Compend of Human Anatomy. By D. GREGG METHANY, M. D. 99
International Clinics. Edited by HENRY W. CATTELL, M. D. 99

PATHOLOGY AND BACTERIOLOGY

The Lymphocyte in Transplanted Cancer 100

"A Dependable Ally"

All too frequently when the natural defences of the body call for support and reinforcement, the reserve forces are found to be weak and inadequate. The aid of a good tonic becomes urgent, therefore, if the body is to win in the conflict with disease.

As a dependable ally to the physiologic forces of the body

Gray's Glycerine Tonic Comp.

has proven its value beyond all question during the twenty-five years it has been at the command of the medical profession.

It is simple yet appealing in its composition; the ingredients of "Gray's" are selected and combined with a care to quality and uniformity that assures therapeutic effects impossible to obtain with nondescript substitutes.

Samples On Request

The success of "Gray's" is a success built upon efficiency and reliability—**the attainment of results**; in no other way could it have won the regard and confidence of the thousands of physicians to whom it is "the first thought" *whenever a tonic is needed.*

The Purdue Frederick Co.
135 Christopher Street
New York City

NEW YORK STATE MEDICAL LIBRARY

The Library contains 19,460 bound volumes, several thousand pamphlets and unbound periodicals, and receives currently about 500 serials.

Hours of Opening.—Each week day (Christmas, Thanksgiving and Fourth of July excepted) from 9 A. M. to 6 P. M. and on Tuesdays and Thursdays until 10 P. M. from October to May, inclusive.

Loans.—Books may be borrowed by any licensed physician in the State, by full-time instructors on the faculty of any medical college, members of the house staff of any hospital, registered and certified nurses, or any one engaged in medical work or pathological research who offers suitable references and credentials. The borrower shall pay return postage on books loaned outside of Albany, use such care in packing as to guard against injury in transportation, and pay for books lost or damaged.

Length of Loan.—The period of loan is two weeks for periodicals; four weeks for other works.

Physicians coming to the library for special research will find it to their advantage to notify the librarian in advance as to the books or subjects desired and the date of the prospective visit.

Library of Surgeon-General's Office, U. S. A.—Physicians wishing books from this National Medical Library may obtain them for two weeks through this Library by paying express charges both ways.

Gifts.—Gifts of books, periodicals or reprints are earnestly solicited. Even single volumes or odd numbers of periodicals of little value to the owner may help to complete valuable sets.

FEDERAL ANTI-NARCOTIC LAW
AND
GLYCO-HEROIN (SMITH)

The composition of Glyco-Heroin (Smith) is not being changed to meet any of the exemptions or privileges allowed under the so-called, "Harrison Anti-Narcotic Law," and whereby it might be sold to the public.

Glyco-Heroin (Smith) will remain just what it always has been and just what it was always intended to be, viz: a stable, uniform and dependable product for the convenience and use of physicians only, in the treatment of Cough, Bronchitis, Whooping Cough, etc.

In prescribing Glyco-Heroin (Smith) use ordinary prescription blanks. Give the name and address of patient, your own name and address in full, your registry number and date when written (no copy or other record required).

Prescriptions cannot be refilled.

MARTIN H. SMITH CO. : : New York

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. HANDBOOK on Patents sent free. Oldest agency for securing patents.
Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

NEW YORK STATE MEDICAL LIBRARY

As an appendix to the 1913 Report of the Director of the State Library appears a list of complete sets of Medical serials in the Library, reprints of which will be distributed to physicians of the State.

The State Library has in its custody several thousand duplicate volumes of Transactions of the Medical Society of the State of New York, including most of the issues, except the originals of the earliest years, which are out of print. Any physician desiring volumes to complete his set may obtain them upon application to the Library, if the request is received before the stock is otherwise disposed of.

The record of Library attendance for the first two months of the college term shows an increase of 229 readers (or more than 16 per cent) over the number for the corresponding months last year. Although evening use on the two nights when the Medical room is open has increased but slightly, the growing demand for medical books at the general reference desk indicates a tendency on the part of the students to use the Library every evening.

BUFFALO MEDICAL JOURNAL

(Monthly)

Third oldest in America, founded by Austin Flint, 1845.

Edited by A. L. Benedict, one of the founders of the American Gastro-Enterologic Association, author of Golden Rules of Dietetics, etc.

Scientific, but practical—no "addresses" nor meditative articles. Abstracts directly from foreign journals and American journals usually skipped by the weeklies. Especially in the interests of the profession of western New York, but goes all over the world.

Subscription, $2.00; advertising rates on request.

ERGOAPIOL (Smith)

For
AMENORRHEA
DYSMENORRHEA
MENORRHAGIA
METRORRHAGIA
ETC.

ERGOAPIOL (Smith) is supplied only in packages containing twenty capsules.

DOSE: One to two capsules three or four times a day.

SAMPLES and LITERATURE SENT ON REQUEST.

MARTIN H. SMITH COMPANY, New York, N.Y.,U.S.A.

Obtainable of any Pharmacy in Albany on Prescription

Park's
Compound Liquor of Arsenic Bromide

(Dixson)

The Modifier of Nerve Perturbation

in combination with the

Nerve Tonic, the Alterative and the Nutrient Elements

Formulated and approved by the late Dr. Roswell Park.

Write for free sample and circular giving *formula, uses, dosage, etc.*

Prepared and Marketed by
JOHN B. DIXSON
129 Riverside Ave. Buffalo, N. Y.

GASTROGEN
TABLETS
Correct
HYPERACIDITY
Sample On Request
Bristol-Myers Co.
Brooklyn, N. Y

THE SALICYLIC ACID FROM THE NATURAL OIL.

Tongaline

MELLIER

ANTI-RHEUMATIC
ANTI-NEURALGIC

Relieves Pain • Allays Fever • Eliminates Poisons.

Samples on Application MELLIER DRUG COMPANY St. Louis

MARSHALL SANITARIUM

TROY, N. Y.

A licensed retreat for the care and treatment of Nervous and Mental Disorders and Drug and Alcohol Addictions. Beautiful location and modern equipment. Terms moderate.

For circulars, etc., address

C. J. PATTERSON, M. D. - - Physician in Charge

BRIGHAM HALL, *CANANDAIGUA. NEW YORK*

. . . A Private Hospital for the Insane . . .

ESTABLISHED 1855

Address ROBERT G. COOK, M. D., Resident Physician

A. B. HUESTED & CO.

Chemists, Druggists and Family Apothecaries

Surgical Instruments, Dressings and Physicians' Supplies; Drugs, Chemicals, Sponges, Toilet Articles, &c.

State Street Corner of Eagle, - - - - Albany, N. Y.

PHYLACOGEN IN PNEUMONIA.—Perhaps no disease has baffled medical treatment to a greater extent than has lobar pneumonia. It must be conceded that as yet there is no true specific for the disease. The mortality from this type of pneumonia is high as compared with that of most other infectious diseases. In view of these facts, any agent that nearly approaches the specific in lobar pneumonia should be welcomed by the medical profession. Pneumonia Phylacogen is believed to merit that distinction.

In the use of Pneumonia Phylacogen, as in that of the various other Phylacogens, observance of certain details of administration may have an important bearing on the results. The product may be administered either subcutaneously or intravenously. The first dose should invariably be given subcutaneously. Injections should be made slowly—as slowly as possible, in fact. When injections are made hypodermatically the needle should not be allowed to enter the superficial fascia or muscular tissue. Certain patients, it has been found, do not absorb Phylacogen, when subcutaneously administered, with sufficient rapidity to produce the desired effect. Such cases will usually respond promptly to small doses given intravenously.

Large initial doses should be avoided. One cubic centimeter will usually be suitable for the initial subcutaneous dose, and for debilitated persons it is well not to exceed one-half cubic centimeter. The increase in dose should be gradual—usually one-half to one cubic centimeter per diem, depending upon the effect of the previous dose upon temperature and pulse-rate, and only when these have again become normal should another injection be made.

The initial intravenous dose, which should always be preceded by one or more doses subcutaneously, should not be more than one-eighth to one-quarter cubic centimeter (say 2 to 4 minims). Subsequently the dose may be increased by one-eighth to one-half cubic centimeter each day, according to the general indications, avoiding if possible the production of a marked constitutional reaction.

Pneumonia Phylacogen, which is supplied in 10 cubic centimeter rubber-stoppered glass vials, is preserved with an antiseptic, and, with ordinary care, will not deteriorate as a consequence of exposure due to opening the vial. None of the material need therefore be wasted.

K&O. DOUCHE FOR THE APPLICATION OF GLYCO-THYMOLINE TO THE NASAL CAVITIES

GLYCO-THYMOLINE
FOR
CATARRHAL CONDITIONS
Nasal, Throat
Intestinal
Stomach, Rectal
and Utero-Vaginal

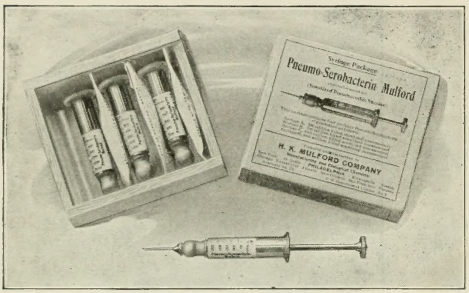
KRESS & OWEN COMPANY
361-363 PEARL ST. NEW YORK

Sole Agents for Great Britain: THOS. CHRISTY & CO 4, 10 and 12 Old Swan Lane, London, E. C., England

Treatment and Prophylaxis of Lobar Pneumonia

Recovery from Pneumonia depends chiefly upon the formation of antibodies destructive to the pneumococci and capable of neutralizing their toxic principles.

Antipneumococcic Serum, Polyvalent, Mulford, is the blood serum of horses immunized against different strains of pneumococci that produce corresponding antibodies, and is, therefore, polyvalent. **Used in the early stages of pneumonia** and in sufficient doses, the serum affords valuable aid on account of these contained specific antibodies.



Syringe package of Pneumo-Serobacterin, ready for immediate use. The graduations of the syringe permit convenient administration of divided doses.

Dosage and Administration.—The therapeutic dose should be at least 100 mils. (c.c.), repeated every four to six hours, to secure sufficient antibodies in the patient to overcome infection. Since quick response is desired, intravenous use of the serum is preferred. In a series of cases reported the total amount of serum administered intravenously ranged from 190 to 460 mils. (c.c.); one patient received a total of 700 mils. (c.c.)

Antipneumococcic Serum Mulford (polyvalent) is furnished in aseptic glass syringes containing 20 mils. (c.c.) and in 50 mils. (c.c.) ampuls, with special apparatus for intravenous injection.

Pneumo-Serobacterin Treatment

The value of Pneumo-Serobacterin in the treatment of pneumonia depends upon the polyvalency, the production of antibodies and early administration. It is frequently employed as an adjunct to serum treatment, stimulating the production of greater amounts of antibodies by the patient.

Time is a vital factor in the treatment of pneumonia. The early use of **Pneumo-Serobacterin** is advised; its action is prompt and increased doses may be given at short intervals, securing quicker immunizing response.

Prophylactic Immunization Against Pneumonia

Summarizing a report by Sir Almoth E. Wright on immunization among a large number of African native miners having very low resistance against the pneumococcus, the London Lancet says: "It seems difficult to resist the conclusion that the pneumococcus vaccines employed by these observers lessened the incidence and mortality of pneumonia and other conditions produced by the pneumococcus, and among large collections of natives who were highly susceptible to its activity and under conditions favorable to the spread of infection."

For prophylaxis, Wright suggests doses of 1000 million pneumococci as the first dose, followed by a second dose of 1000 million. It is desirable to immunize persons especially susceptible to the pneumococcus, such as those who suffer from repeated attacks of pneumonia, and particularly aged persons.

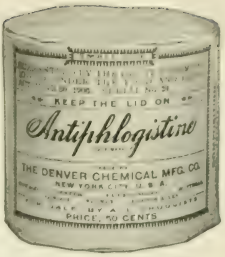
Another field in which prophylactic immunization has been extensively employed is when pneumonia threatens as a complication of typhoid, influenza, etc. The work of Wright and his collaborators verifies in a conclusive manner the usefulness of this practice.

Pneumo-Serobacterin Mulford is supplied in packages of four graduated syringes, A, B, C, D strength, and in syringes of D strength separately.

H. K. MULFORD CO. Manufacturing and Biological Chemists **Philadelphia, U. S. A.**

New York Chicago St. Louis Atlanta New Orleans Minneapolis Kansas City San Francisco Seattle Toronto

In Affections Involving Deep-seated Structures Pneumonia, Pleurisy, Etc.



A Uniform degree of Heat may be maintained for **24** hours, or longer, by covering the thorax with

Antiphlogistine
TRADE MARK

Directions:—Always heat in the original container by placing in hot water.
Needless exposure to the air, impairs its osmotic properties—on which its therapeutic action largely depends.

warm and thick—at the same time allow a liberal margin to overlap the area involved.

In this way, the aggravating symptoms may be almost immediately ameliorated; the cutaneous reflexes stimulated, causing *contraction* of the deep-seated and coincidently *dilation* of the superficial bloodvessels—flushing the peripheral capillaries. Thus the over-worked Heart is relieved from an excessive blood-pressure; congestion and pain also are relieved, and the temperature tends to decline as restoration to normal circulation ensues.

Physicians should WRITE "Antiphlogistine" to AVOID "substitutes."

"There's Only One Antiphlogistine."

MAIN OFFICE AND LABORATORIES

THE DENVER CHEMICAL MFG. CO., NEW YORK, U. S. A.

Branches: LONDON, SYDNEY, BERLIN, PARIS, BUENOS AIRES, BARCELONA, MONTREAL

Union University

Medical Department

Albany Medical College

Founded 1838

A complete reorganization has been effected during the past year. Largely increased hospital facilities have been assured with teaching services both in medicine and surgery, students having immediate responsibility under supervision. The laboratory staff has been increased and the courses rearranged to conform to improved methods. With these changes, it is believed that the Albany Medical College is prepared to furnish instruction which will meet the highest demands of modern medical education.

Admission Requirements: Each candidate for admission must present his Medical Student's certificate from the Examination Division of the Board of Regents of the State of New York. In addition to the Regents' certificate the student is also required to show evidence of the satisfactory completion, in a recognized college or scientific school, of at least one year's course of study including French or German, biology, physics and chemistry, or an equivalent. Union College, the academic department of Union University, Schenectady, N. Y., has arranged for such a course.

Tuition: The charge for tuition is $160.00 a year and $5.00 for matriculation. There are no extra fees except for rental of microscopes and laboratory breakage.

The academic year begins Sept. 27, 1915. All inquiries and other communications should be addressed to Thomas Ordway, M. D., Dean, Albany Medical College, Albany, N. Y.

Directing the Nutrition of the Normal Healthy Infant

is a problem that is coming before the physician more and more as one of the most important phases of preventive medicine.

The management of an infant's diet is not a difficult task—it simply means a supply of food elements that are necessary to sustain life and promote growth and a knowledge of some method of adjusting these elements to the individual condition.

The Mellin's Food Method of Milk Modification

meets the requirements in a scientific manner and offers the physician an opportunity to readily acquire a satisfactory solution of the problem.

Communicate with the

MELLIN'S FOOD COMPANY, BOSTON, MASS.

NURSES

Pupil nurses for the care of the sick at home, can be secured at a moderate price through the Superintendent of the Guild for the Care of the Sick, 390 Madison Avenue. These nurses are under the daily supervision of a Staff of Hospital graduate visiting nurses.

OFFICE HOURS: 8.30 to 9.00 A. M. / 1.30 to 2.30 P. M. / 7.00 to 7.30 P. M.

Hudson River Telephone 3081 Main
Home Telephone 1353

For the Sick and Convalescent

Broths, Jellies and Custards
Prepared Scientifically.

For the Babies

Milk modified for infants according to physicians' formulas.

ALBANY GUILD DIET KITCHEN

390 Madison Avenue, Albany
H. R. Telephone, 3327 Main

INTEROL READER.—The world is full of fallacies—it is fed upon half truths. It drinks in sophistry and then wonder is expressed that the millennium is so long deferred.

Take, for instance, the unfortunate use of the terms "expensive" and "high-priced" or of "costly" and "cheap."

Price, be it high or low, is what one *pays*.

It has nothing to do with what is received.

Quality, on the other hand, is what one gets, or fails to get. Service, ditto.

A useless, or inferior, article or service, even when bought for a low price, is expensive and costly!

On the other hand, the better or higher the quality or the service that is obtainable, the higher the price, which is a great natural law. Hence, high-priced should, and usually does, mean high quality or service.

In fact, a moment's reflection will show that the impression created in the mind of a person of average intelligence, by the word "cheap" applied to a person or a thing, suggests inferiority.

A cheap person or thing is apt to prove the most expensive. A high-priced person or thing usually turns out to be the most economical.

And, it is a most important fact that this applies with especial force to therapeutic agents of any kind intended for use by the physician, and with fulminant emphasis to drugs or agents that have to be put into the human body.

The physician who hesitates or is influenced by "high price," provided he knows the reputation and standing of the parties marketing the product, is false to his obligation to himself and to his patient.

All of which applies with especial force to mineral oil and particularly to Interol.

W. B. SAUNDERS COMPANY, Publishers of Philadelphia and London, have just issued their 1916 eighty-four page illustrated catalogue. As great care has evidently been taken in its production as in the manufacture of their books. It is a descriptive catalogue in the truest sense, telling you just what you will find in their books and showing you by specimen cuts the type of illustrations used. It is really an index to modern medical literature, describing some 300 titles, including 45 new books and new editions not in former issues.

A postal sent to W. B. Saunders Company, Philadelphia, will bring you a copy—and you should have one.

ESTABLISHMENT OF A DEPARTMENT OF HYGIENE, SANITATION AND EPIDEMIOLOGY.—The H. K. Mulford Company announces the establishment of a department of Sanitation and Epidemiology, under the executive management of Thomas W. Jackson, M. D., expert in preventive medicine, sanitation and the study and control of epidemic diseases.

The most important subjects before the American people at the present time relate to the public health. Work in this field is frequently beyond the reach of the existing health and sanitary departments of the various municipalities and smaller towns, on account of limited appropriations.

The department does not propose to enter into competition with the constituted public health authorities, Local State or Federal, but to aid and assist these authorities in every possible way. The work is essentially one of service and education, and will be developed along these lines. The resources and equipment of the Mulford Laboratories, Chemical and Bacteriological, will be utilized, thus placing at the disposal of the new department the entire laboratory facilities and expert services of the H. K. Mulford Company.

To
BUILD
UP
To
BRACE
UP
To
TONE
UP

Supplied in 11-ounce bottles only—never in bulk.

Samples and literature sent upon request.

Prescribe original bottle to avoid substitution.

In ANY form of DEVITALIZATION
prescribe

Pepto-Manyan (Gude)

Especially useful in

ANEMIA of All Varieties:
CHLOROSIS: AMENORRHEA:
BRIGHT'S DISEASE: CHOREA:
TUBERCULOSIS: RICKETS:
RHEUMATISM: MALARIA:
MALNUTRITION: CONVALESCENCE:
As a GENERAL SYSTEMIC TONIC
After LA GRIPPE, TYPHOID, Etc.

DOSE: One tablespoonful after each meal.
Children in proportion.

M. J. BREITENBACH COMPANY
New York, U. S. A.

Our Bacteriological Wall Chart or our Differential Diagnosis Chart will be sent to any Physician upon request.

Albany College of Pharmacy

Department of Pharmacy—Union University

ORGANIZED IN 1881.

It is now in its thirty-third year, and from a small beginning has grown to a large measure of usefulness. It has sent out seven hundred and forty young men and women with the degree of Ph.G., to lives of honor and usefulness. Its graduates have no difficulty in finding lucrative positions.

The instruction is practical and theoretical, half of the time being employed in laboratory work.

The work is comprised in two terms, of seven months each.

Fees: $95.00 per term. Catalogue sent on application. Address,

ALFRED B. HUESTED, M. D., PH.G., *Secretary*,
Albany, N. Y.

"MAN BEGINS TO DIE
AS SOON AS HE IS BORN!"

Obstipation---Stasis---Autotoxemia
hastens the process

To treat this Syndrome requires perfect lubrication.
Perfect lubrication calls for INTEROL.

Why experiment?

INTEROL has correct body, effective viscosity; no suggestion of flavor or odor (even when heated to 100° C.); has been hyper-refined and is safe.

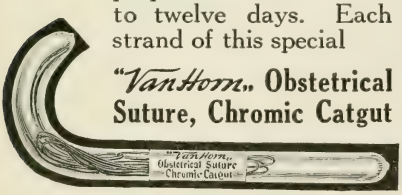
INTEROL SECURES RESULTS IN HANDS THAT KNOW HOW—AND WHEN—TO USE INTEROL.

Obtainable of your druggist. Booklet on request.

VAN HORN and SAWTELL
15 and 17 East 40th Street
NEW YORK CITY

IN THAT CONFINEMENT TEAR

If you favor immediate repair, use our especially chromicized catgut prepared to hold seven to twelve days. Each strand of this special



"VanHorn" Obstetrical Suture, Chromic Catgut

is threaded on a suitable needle, ready for instant use. Indispensable for your surgical bag. One tube in each box. Price, 25 cents each; $3.00 per dozen tubes. No samples.

For Sale by Your Dealer,
or Sent Upon Receipt of Price

VAN HORN and SAWTELL

New York, U. S. A.
15-17 E. 40th Street
AND
London, England
31-33 High Holborn

"The Cleanest of Lubricants"

K-Y *Lubricating Jelly* (REG. U. S. PAT. OFF.)
"The Perfect Surgical Lubricant"

Absolutely sterile, antiseptic yet non-irritating to the most sensitive tissues, water-soluble, non-greasy and non-corrosive to instruments, "K-Y" does not stain the clothing or dressings.

Invaluable for lubricating *catheters, colon* and *rectal tubes, specula, sounds* and whenever aseptic or surgical lubrication is required.

Supplied in collapsible tubes.

Samples on request.

VAN HORN & SAWTELL

NEW YORK CITY
15-17 East 40th Street
and
LONDON, ENGLAND
31-33 High Holborn

VOL. XXXVII FEBRUARY, 1916 No. 2

ALBANY MEDICAL ANNALS

Original Communications

THE ADMINISTRATION OF THE CARBONIC ACID BRINE BATHS (NAUHEIM BATHS).

Read at a meeting of the Saratoga County Medical Society, Saratoga Springs, N. Y., October 22, 1915.

BY JAMES HENRY HONAN, M. D.,

Of Bad-Nauheim, Germany, and Augusta, Ga.

The administration of the CO_2 brine baths is a subject requiring much preparation and thought on the part of the physician who prescribes them, in order that the greatest benefits should result for his patients.

First, the physician must understand the condition of his patient and whether such a course of treatment is indicated.

Second, he must know the mechanical and physiological action of the baths.

Third, he must keep a close watch on the patient to determine his individual needs—to know the effects of the baths from day to day on the individual patient, and to make such modification in the treatment as the case requires.

The physician must determine the kind and the strength of the baths, not for an entire course but from day to day, as he is guided by his observations of the patient.

He must be familiar with the action of the salts, of the carbonic acid gas, of the temperature; and what combinations best give the results he is striving to obtain.

Aside from the nature and temperature of the baths, there are other important matters, namely, the duration of each bath, the depth of each bath, the grouping of the baths in the series, the number of baths for the respective course, the length of time for the course of treatment, the question of the "after-cure," and the frequency of the repetition of the course of treatment for the individual patient.

The bath designated at the Spa as the "Thermal" is the one with which we generally begin the course. Occasionally we find children or very frail patients for whom it is necessary to give at the beginning, the *sool-bad,* or simple sodium chloride salt bath. All the "Thermal" baths have the full complement of salts but no free CO_2 gas. The average patient takes six or eight or nine of these before beginning the Thermal Sprudels which have all the salts of the Thermal, differing from the Thermal in that the waters are a saturated solution of the CO_2 gas. After eight to ten of these Thermal Sprudels some patients are promoted to the Sprudels, which baths are usually continued through the course.

The Sprudel, besides containing all the salts, is a supersaturated solution of CO_2 gas.

The duration of the bath varies according to the condition and improvement of the patient. It is my custom to begin cautiously with patients who have not taken the baths before, making the time of the first bath not more than five or six minutes and increasing the time very gradually until the period of immersion reaches eleven to eighteen minutes, depending on the reaction after each bath. It seldom requires longer than eighteen minutes to obtain the maximum reaction.

The temperature of the CO_2 brine bath depends on the condition of the patient. The general rule is to administer the baths at the neutral zone of temperature 33° to 34° C. or 92° to 94° F., at which temperature we depend almost entirely on the salts alone or on the salts and CO_2 for the physiological action. Patients suffering from high blood pressure due to overeating will at times not respond readily to the baths. In such cases it is often necessary to increase the temperature of the bath to cause a more prompt dilatation of the peripheral capillaries. In subnormal blood pressure cases it is often necessary to reduce the temperature of the bath below the neutral zone in order to add an extra stimulus to the flaccid arterial wall.

There is a prevalent idea that a *certain number* of baths constitutes a course and that all patients must take that number to receive benefit, which experience shows to be erroneous. The different pathological conditions vary so much that one cannot foretell how many baths will be required to bring about an im-

provement, and since the temperaments of the patients vary widely, it is impossible to tell in advance how the baths may affect the individual. Allowing for all these variations the patient may require from 18 to 20, or in rare cases even 30, baths.

One of the things to be insisted upon is that there should be a month's time for the treatment. I repeatedly refuse to take patients who have but two weeks to spare, as in the majority of cases it would be a waste of their time and money. Then again, if they think their health of so little importance that not more than two weeks for its care can be spared from their social or business life, they will probably be regardless in other ways of the physician's advice and difficult to do anything for, as far as lasting results are concerned. It is only the exceptional case which shows indications for a short course of treatment.

Some patients, I find, should be kept on Thermals for the entire course, others should have both the Thermals and Thermal Sprudels and few or no Sprudels. It is not advisable to begin a course with the Thermal Sprudels, or the Sprudels or change from the Thermals to the Sprudels. In some instances, when I am not satisfied with the effects of the Sprudel, I put the patient back on the Thermal Sprudels, or the Thermals.

Some patients are entirely cured after one or two courses of treatment, others must have a course of baths at regular intervals to keep them going from year to year. A great many patients had not missed a summer at Bad-Nauheim in 20 or 25 years until this year. In this way their cardio-vascular efficiency has been maintained.

A great part of the general public has a false impression of what constitutes a Nauheim bath, attributing too much importance to the carbonic acid gas and too little to the other valuable features and well satisfied with a fizz in the tub. There is a general belief that the small disk or package labeled "Nauheim bath" bought at their druggist's is the imported product from the Nauheim springs. This mistake is not to be wondered at, or that even physicians inquire from me as to whether these are real or contain the essential ingredients.

This so-called Nauheim bath differs materially from the real

bath of that name. It may, however, have some efficacy when properly precribed and administered.

It is my opinion that a bath cannot be properly charged by the generation of the carbonic acid gas in the tub, and that the salts in the disks are not of sufficient quantity to be effectual.

Baths made with all the essential mineral ingredients of the Nauheim analysis, have been used in thousands of cases by Prof. Brieger, Ottfried Müller, and others, with satisfactory results, which is evidence that an effectual bath can be made when all the essential ingredients are employed, whether the ingredients are obtained from the chemist or from the springs. The *essential* salts for one bath weigh a little more than thirteen pounds.

In my own practice in America, I have used the salts from the original springs with as good results as I obtain at Nauheim. There is ample evidence, however, of the therapeutic value of the properly made artificial bath.

Although I have made no continued observations of the Saratoga Springs, to my mind there is every reason to believe that the Saratoga waters with slight modifications make a bath of great efficacy, differing in no essential respect from the Nauheim springs and producing satisfactory therapeutic results. The chief difference which I find in giving the treatment in this country and in Europe, is that abroad the majority of my patients are farther away from business and family cares—they are less unwilling to go to the mountains or some quiet place for some weeks or months of rest and at least they have the benefit of a voyage of a week or ten days. One of the difficulties in our own country is that business associates follow the patient and disturb him while he is having his treatment. He is inclined to keep a hold on his business affairs at home, or to hurry back to resume active duties as soon as he begins to feel better. I am convinced that with the co-operation of the patient, and the proper care on the part of the physician as to the nature of the baths and their administration, as good and permanent results may be had in America as elsewhere.

The "Nach-kur" or after-cure is frequently advised. This is often necessary for patients suffering from a very weakened condition of the myocardium. After the first course of baths is finished, the patient is sent away to some restful place where

there is little to stimulate active exercise, for a stay of from two to twelve weeks. The exercise of all such patients must be regulated accurately and controlled by the physician as to length and pace and the increase. After such an interval, the patient returns for an after-cure or an additional series of from ten to fourteen baths.

To obtain the best results from the CO_2 brine baths, the physician must be thoroughly familiar with the physiological action of the baths. He must know what condition requires a bath of six minutes and what condition requires a bath of sixteen minutes. He must know why, when and how much to reduce or increase the temperature of the bath. He must know when to change from the Thermal to the Thermal Sprudel or when to change from the Thermal Sprudel to the Sprudel or when the Sprudel is inadvisable. These facts can best be obtained by the study and observations of patients in the bath. Such observations of patients during immersion, give the physician the clearest conception of the physiological action of the baths.

The CO_2 brine baths should be administered or prescribed only by physicians who have given thought and time to the subject and who employ the greatest possible care and understanding in meeting the requirements of the different pathological conditions which their patients present. The public as well as medical men must realize that a therapeutic measure so potent for good, may also do harm, if not properly administered.

It is my custom to see the patient after each bath, before deciding on the next bath, whether to continue or change the full bath, half bath or three-quarters bath prescribed, whether the temperature should be increased one-half degree or lowered a degree. To find out whether the patient has any feeling of oppression or weight on the chest during the bath, whether he had any difficulty in breathing while in the bath and to determine whether the duration of the bath should be increased or diminished, whether to administer one bath and a rest day or two consecutive baths with a rest day, or whether three baths consecutively are indicated. Inquiring each day into the sleep, appetite, rest, relaxation, heart gymnastics, exercise, bowel- and kidney-function, the physician is enable to correct any little detail which points the wrong way. Not the least of the advantages

to be gained is the feeling of confidence given to very ill patients who, knowing the gravity of their condition, see that the physician is giving time and thought to every detail for their restoration to health.

In some cases it is important that the physician shall see the patient in the bath. It is my practice to see most of my patients in their first bath. This is particularly true if there is evidence of cardiac insufficiency. I usually take the pulse before the bath and during the greater part or whole of the time of immersion. In this way one is able to discover any slight change in the pulse, any distress of breathing, or other signal for apprehension or for modification in the treatment.

The attendant should be well trained in every detail of the administration of the bath and be a careful observer of the patient, that any unfavorable sign that the patient is not taking the bath well, may be reported to the physician at once.

The patient must be quiet in the bath and the attendant should be instructed not to converse with the patient or in any way tax or excite him.

I have had to dispense with the services of more than one otherwise very good trained nurse who refused to see the importance of this instruction and insisted on keeping up a lively chat with the patient.

The lengthened diastole can best be observed with the stethoscope over the precordia, hence the stethoscopic examination should be made after each bath.

The CO_2 brine baths should be given at a spa or in an especially prepared institution as their proper administration requires special equipment.

The steam-coil or hot-water-coil must be at each tub, in order that the large towel thrown over the patient as he steps out of the bath may be thoroughly warmed.

The individual patient must have personal attention at each bath and this attention can be much better controlled in an institution or at a spa. Besides lack of equipment, the principal objection to administering the baths in the home is the patient's inability to control his time. The rest and relaxation after each bath, necessary to the best effects, cannot be obtained in the home where the patient is aroused by every ring of the telephone

or door bell, where every sound reaching the ear about the house has a certain significance and may arouse a train of thought that is more or less exciting to the patient and makes relaxation impossible. If the patient is away from home better control can be kept on his time, his rest and his exercise.

One hour to an hour and a half's *rest* in the recumbent position, after each bath, is a very necessary auxiliary of the bath. It permits of the readjustment of the circulation after the changes which have taken place in the bath. It also quiets the nervous system and even a restless patient soon learns to enjoy his hour of rest and relaxation. The patient returned to his room, and having removed his clothing, should lie quietly in the darkened chamber and relax every muscle. His mind should be kept as inactive as possible during the time of rest. Though sleep is not essential, it is all the better if the patient loses consciousness.

On this my second visit to Saratoga Springs, I realize more fully what you have here,—springs affording the greatest possibilities, the advantage of state ownership and control, a Reservation Commission consisting of able men whose efforts and time are a generous gift to the state. When I see what this Commission and the efficient Medical Director have done with the small sums put at their disposal, how inadequate and petty the appropriations are in proportion to the needs, one can but regret that there should be further delay in setting aside adequate sums, reaching into the millions, for the proper and adequate development of Saratoga Springs. The appropriations should be large enough to enable the Commission to eliminate all undesirable features regardless of temporary loss and to make the development along therapeutic lines with plans for the future, though there be no considerable pecuniary returns for some time from the investment. The Commission should not be hampered by having to show large financial earnings for the next few years.

With sufficiently large funds at their command, this development might go on for ten, fifteen or even twenty years, every year yielding large therapeutic dividends. At the end of twenty years, Saratoga Springs would then be, it is my opinion, one of the greatest spas, one of the greatest health resorts of the world, ——it will then be rich enough to pay for itself in other than health-giving currency.

When one sees the millions of dollars employed in constructive work in America, when one sees the great fortunes left in bequests every year, we wonder how long the citizens and statesmen of our country will continue to neglect the greater opportunity of these springs.

It is to be hoped that we may soon see adequate provisions and conditions for the fulfillment of the great promise of Saratoga Springs.

THE PREVENTION OF FEEBLE-MINDEDNESS.

Read before the Sixteenth New York State Conference of Charities and Correction, Albany, N. Y., November 17, 1915.

By MARTIN W. BARR, M. D.,

Chief Physician of the Pennsylvania Training School for Feeble-minded Children, Elwyn, Pa.

Feeble-mindedness is a generic term covering every phase of defect—moral as well as mental—and for this reason I use it advisedly as one needing to be better understood by the general public.

After years of misunderstanding, even stolid indifference, the world is at last awakening to the fact that there is an element of defect penetrating and permeating every grade of society, from hut to palace.

For this not only is there no cure—for that which the cradle rocks the spade will cover—but also as a sure agent in transmission, its reappearance through successive generations is inevitable.

Heredity is as truly a law for humankind, as it is well recognized to be for lower-animal, and for plant life.

Defect once permitted to invade a lineage can never be *wholly* eradicated; lessened materially, and even reduced to a minimum it may be, but sooner or later it will surely reappear. The facts which records present of its startling increase within two decades, surely show the need of restriction, and that legal protection necessary to prevent social degeneration.

The Registrar General's last statistics in Great Britain show that of a population of 36,070,492—161,963 were returned as suffering from mental infirmity—106,660 being insane and

55,303 mentally defective; showing an increase of insanity 27.3 per cent, and of mental defect 13.2 per cent.

Our latest statistics reveal the fact that not less than ten per cent of the present population of the United States is mentally defective.

There are now 200,000 feeble-minded in New York State; and a large number of these as drunkards, drug-addicts or defective delinquents, equally a menace to society, demand *permanent* sequestration.

There are, in round numbers, 750,000 children attending school in New York City; of these, 15,000—two per cent—are mentally defective in greater or less degree.

It is estimated that two per cent of all school children are feeble-minded, sixty-five per cent of which being due to heredity.

Some 21,000 of the feeble-minded and epileptic are provided for by twenty-seven States in thirty-seven institutions; in addition, some 1,000 are cared for in private schools. Therefore, there are at least 328,000 mental and moral defectives at large, perpetrating, unrestrained, the defilement of the race.

Throughout the entire United States no less than $94,000,000 is annually spent in the care of the insane, and $90,000,000 for the feeble-minded; making a total of $184,000,000 expended, yearly, upon our helpless, hopeless population.

The percentage of mental defect among the foreign element in the city of New York, where our immigrants are mainly admitted, is 2.48 times greater than that of the native-born. A study made there in 1912, of the alien insane and feeble-minded cared for in the State hospitals, shows no less than 13,163 foreign-born patients. For these, at a cost of $262 per capita, the annual expenditure amounted to $3,448,707, and as the average hospital age is eleven years, the sum of $37,935,766 will have been paid by the State at the end of that period for the care of mentally defective and diseased aliens.

There can be no doubt but that the physiologic, psychologic and sociologic researches of the 18th and 19th centuries have, within the sixty years portrayed, certainly found practical results in the increased *protection* provided for *defectives*. But the greater aim of *protection* of the *race* from contamination and degeneration has hardly been considered.

A glance at the exposition which science has given in relation to cause and effect, may make clear the means by which the ultimate suppression of so great an ill may best be attained.

That heredity is naturally a dominating factor in all life is clearly proven in the researches of Mendel, which exhibit, unerringly, how definite characters are formed in the individual, and how directly they are transmitted; so that descendants to at least the fifth generation may develop the characteristics of their forbears in greater or less degree. Not that the child will necessarily exhibit actually the same defects or qualities of the parent, but it does inherit a strain, be it good or bad, which will be stimulated or kept in abeyance according to the prepotency of connection.

Science, following up this principle, has shown furthermore that by a careful study of family history, recognizing peculiarities or traits lacking, it may be possible to *suppress,* but not to *eliminate* this strain. The Mendelian law clearly affirms that the germ plasma of normal male and female contains a "determiner element" for every tissue of the body; and when these "determiner elements" are of equal potency, and blend perfectly, the descendants will possess characteristics of both parents. Whenever there is a defect in the germ plasma in one parent, the analagous "determiner" of the other will assert itself, and the child inherits the stronger characteristic, be it good or evil. Thus it is not infrequently observed that apparently normal persons produce feeble-minded children; or there are families where some members are bright, and one or two, for no apparent reason, feeble-minded; while on the other hand is seen a normal child, the offspring of parents—one normal and the other abnormal. Such are clear examples of the prepotency of the infusion of pure blood; the taint is there all the same, in abeyance, ready to respond to the first call or inheritance or accident.

This is especially to be noted of mental defect. Imbecility will breed imbecility; and where there is a trace of feeble-mindedness in a family it is sure to materialize, the defective "germ plasma" producing an abnormal; insanity or defect—mental, moral and physical—inevitably finding a corollary in after history.

Recently my attention was called to a family where both parents being feeble-minded, there were twenty-two imbecile children; in yet another were eighteen idiot children—also of defective parents—the community in which these latter lived, taking pride in exhibiting them as curiosities. In one family, in four generations, there are thirty-four imbeciles; and two other families, each with an idiot mother, show in the one seven, in the other nine illegitimate children. Another case I have under my care is that of a feeble-minded girl who suddenly became insane. She has three imbecile sisters—one a pronounced nymphomaniac. The mother and her two sisters (the latter harlots) are all feeble-minded; and both father and grandfather are incurably insane.

Surely some one should have suggested that all these cases required surgical aid; yet no steps have been taken to that end.

Venereal diseases, both directly and indirectly, are potent factors in the production of feeble-mindedness; nullifying the wage-earning capacity of the father, and reducing the poor, innocent mother to a state of hopeless invalidism.

This destruction of domestic happiness, lowering the whole *morale* of family life, is finally visited on the unborn child, who enters life the diseased, starved victim of an unhealthy heredity and environment.

These so called social diseases are not self-eliminating.

Syphilis is fitly named the "King of Abortionists" and Gonorrhea the "Queen of Sterility."

In 4,588 deaths from syphilis, 2,101 died before reaching the age of five years; proving that almost one-half were hereditary. In 18,770 cases of epilepsy, ten per cent was attributed directly to syphilis; as was also twenty per cent of 187,791 insane cases. Of 64,000 cases of blindness, twenty-five per cent was traceable to gonorrhea.

There are 500,000 public prostitutes in the United States, and 1,000,000 secret prostitutes, who bring forth feeble-minded children; and all are infected with gonorrhea or syphilis, or both. And it is estimated that 15,000,000 men are infected each year and they in turn infect the same number of women.

In a study of harlots numbering 424—eighty per cent plus, were found to be distinctly imbecile; their mental age never

exceeding twelve years. The twenty per cent adjudged normal were found to be unable to carry on a consecutive conversation; and, never reading papers or books, were absolutely ignorant of the ordinary topics of the day. A large majority of the whole had contracted venereal diseases, and were pronounced alcoholics and drug-addicts.

Of some studies made in the Juvenile Courts, numbering 1,487 —sixty-one per cent were found imbecile beyond a peradventure, their mental age averaging from seven and one-half to eleven. Of these, over fifty per cent were victims of venereal diseases.

A conservative estimate is that 25 per cent of the inmates of prisons are irresponsible imbeciles, victims of suggestions of stronger minds.

Much of the feeble-mindedness among the lower classes may be traced to the well-meaning but misdirected efforts of many charitable homes and societies, who, caring for children until they reach the emotional age of eighteen or less, turn them adrift when they most need protection and direction. At this most critical period, when malleable, and succumbing readily to suggestions good or evil—usually the latter—both sexes make the most of a newly acquired freedom, and, eager for excitement, with the sexual fires aflame, they soon, in drifting to the bad, find their mates in connections licit or illicit as chance may provide, and reproduce their kind. Earning a scanty living wage—if any at all—with none of the real comforts of life, is it surprising that the majority of the offspring of such conditions should be defective?

Of the causes of feeble-mindedness, in addition to those already considered, unfortunate results may be traced to the condition of the mother during gestation, and to the abuse of drugs and to alcoholism—which latter, with its deleterious effect on cell and germ-life, may, even in moderation, according to Darwin, Gladstone, Cobden and Comte, accomplish more harm than a combination of famine, pestilence and war.

In this summary of cause and effect, one cannot fail to recognize the necessity for the enforcement of measures which experience has demonstrated as absolutely needful steps toward prevention, viz.: the *separation*, *sequestration* and *asex-*

ualization of the feeble-minded; and further revision of marriage laws forbidding increase.

Separation protects society from contamination, and the defective from a world where, brought into competition with normal people, be it in the home, in school or in business circles, he is forever misunderstood and driven backward. Separation, first, of normal from backward children, in the schools, and the massing in classes of those of similar mental capacity: second, the segregation in institutions of those proven defective, that they may be trained in occupations proven possible for them—industrial, manual or intellectual—such as farm and house work, shoe-making, carpentry, dress-making, painting or printing; in these aiding also in the living expenses of their community.

In order to effectually accomplish this the sequestration must be *permanent;* otherwise, *the trained imbecile is a greater menace to society than is the untrained,* in that with latent powers and talents developed to the point of concealing defect, he is no longer recognized, and has opened to him a larger field for the indulgence of instincts—be they criminal or merely emotional.

Training schools for defectives, without the protection of permanent sequestration, find themselves twice defeated in their aim: not only that of preventing increase, and of lessening crime, but in the loss of trained laborers aiding in self-support and in the care of the helpless. For this evil, legislation offers no remedy, no state in the union providing for indeterminate sequestration.

Why might not the Government set aside a reservation for such? Surely they are as deserving as the Indian or the Negro; and such provision would be far more reasonable and economical than penitentiaries, for which there would then be no need.

Asexualization has, at last, won its way to legal recognition as the only assured means of dealing with present numbers; not only preventing increase, but lessening the exaggerated sexual impulses and contributing to the happiness of the individual; thus insuring a certain amount of freedom in either home or community life.

In this matter, the past decade seems to present a new trend of thought, in that what was formerly termed brutality, is beginning to be viewed as simply the safe-guarding of the innocent and the preservation of the Nation from racial degeneracy. Some twelve States have concurred in affirming the necessity for sterilization; Indiana leading the way in finally gaining the endorsement of legislative action.

The application of the principle in these States cannot fail to correct prejudice and misunderstanding in the mind of the general public, making clear the nature and simplicity of an operation involving no danger and almost no discomfort to the subject—and insuring benefit to all.

The removal of the organs is not always essential, but is to be preferred as giving absolute security; and when performed upon youth, desire almost entirely ceases, or at least is held in reasonable abeyance.

There is no reason why the operation should not be so safeguarded as to prevent license. It should be permissible only after study of and testing by accredited alienists and surgeons, and this is best attained in the grouping of numbers by separation and segregation.

In the reconsideration of Marriage Laws, progress is also shown in that a large majority of States—some thirty-eight—make proven defect, in either or both parties, a nullification of marriage; but none as yet require for obtaining a marriage license a certificate exhibiting a clean bill of health for three generations back; notwithstanding the large number of cases recorded showing the reappearance of unsuspected defect, usually intensified, in the third or fourth generation.

It has been urged that stringency of marriage laws would encourage vice; but why not make illicit cohabitation with a defective a penal offense, as does the "Mental Deficiency Act," recently brought into operation in England?

It is to be hoped that the day is not far distant that shall bring a consensus throughout the union, regarding the prevention of procreation by the unfit, as absolutely necessary to stem the tide that is polluting the race.

The separation, segregation and asexualization of the unfit in one generation, must in the nature of things bring a two-fold

blessing, not only reducing numbers in one, but raising and accentuating the standards of successive generations.

With such division of classes presenting a permanent object-lesson of fit and unfit, the question with each individual being simply—"to which shall my descendants belong?"—eugenic marriage will, as the outgrowth of such civilization, become a natural custom with all, as it is now with a few, needing no law to enforce it.

The experience of the ages shows that the progress of a nation is coequal with its maintenance of race-ideals; and that the survival of the fittest can never be attained if no restriction is placed upon the propagation of the unfit.

In this study of feeble-mindedness, the vital importance of its early recognition is a point arrived at by science on many lines—physiologic, psychologic and pedagogic—a dictum which workers in social welfare also endorse, as being clearly proven in their varied experiences.

That the entire lay world should be brought to regard the feeble-minded as a social menace, and the segregation and asexualization of such imperative, has long been affirmed by leaders in the work; and was clearly acknowledged by the women of our land when, the subject being broached before a conference of mothers, I was urged by them not only to preach this doctrine, but to preach it in terms that he who ran might read.

With public thought so crystallized, the demand for increased facilities for the care of irresponsibles must meet with better success than in the past, being accepted by legislation, not as contributions to charities, but a protection to the safety of the general public—an ounce of prevention being recognized as truly worth a pound of cure.

The effect of such conditions and environment upon a rising generation would tend to create a far higher education than the much-vaunted teaching of sexology in schools. Under present conditions a subject forbidden general discussion is often greedily swallowed as poison food by semi-defectives, to the detriment of themselves and others. Whereas the evils of heredity guarded by legislation and as openly discussed as are the evils of war upon a nation, will bring to our youth a normal consciousness that the rite of marriage is not a mere legalizing of

the cohabitation of the sexes—the sentiment of too many of the present day—but an entrance sacred to the vocation of parenthood to which all are not called: a vocation for which the fitting of oneself by the cultivation of the being—mental, moral and physical—toward the gaining of a noble self-hood, constitutes the truest religion as well as following the dictates of the highest patriotism. Such preservation of things sacred would lead, surely, to a day of chivalry greater than that of past ages.

When the World shall be brought to recognize that the production of maimed life is a greater crime than It at present regards its destruction; when the arm of law shall be extended to control sexualism as it now does brutalism; then, growing generations viewing in family and community life the result of true self-control in the noble self-hood attained by their elders, will press onward, inspired by high race-ideals, in this work of race preservation.

THE PRESENT STANDARD OF THE CARE AND TREATMENT IN STATE HOSPITALS.

Read before the Sixteenth New York State Conference of Charities and Corrections, Albany, N. Y., November 17, 1915.

By WILLIAM MABON, M. D.,

Medical Superintendent, Manhattan State Hospital, Ward's Island, New York.

There was a time when the public looked upon the institutions for the insane very much as we now look upon the prisons. The fact that then we spoke of a lunatic asylum and at present speak of a *hospital* for the treatment of mental diseases is not merely a change in name but indicates a profound revolution in the internal development of such institutions.

From merely detention places, in which the essential point of view was the safeguarding of the public against dangerous lunatics, the institutions developed first to custodial institutions in which the welfare of the patient was pushed into the foreground, but the treatment was yet essentially general without adequate reference to the needs of the specific case.

The next step of development was in the direction of the real hospital, in which each case is studied on its own merits, and the treatment as much as possible adapted to the special

needs of the case. With this went hand in hand an appreciation of the social function of the hospital, and whereas formerly the institutions had little relation to the community, such a relation is being brought about more and more, and the physicians in the hospitals are developing a sense of obligation toward the patients, not only while they are under their immediate care, but also towards the patients after they have again become members of the community, and the hospitals are assuming their share in guiding the mental health of the public. With the last phase we have already overstepped the bounds of what is actually accomplished, and have entered upon that phase of development in which we are still engaged, yet which will undoubtedly be accomplished.

Although mental disorders are diseases in which many of the principles are the same as in other diseases, we are dealing in them with more complicated symptoms and *more subtle causes*. More time is required, therefore, to study the individual patient than is often the case in other diseases. Another point is important in this connection. It used to be thought that it was possible to treat mental disorders in a wholesale fashion, but just as little as this is possible with any other disease, so is it here. To be sure, it was under this conception that the transformation of the asylum into the hospital began, and that much of the present spirit of more humane management of the patients was created, but the development went, and has still further to go, in the direction of the individual treatment with special indications based upon the facts of each case.

The very nature of some of the diseases with which the hospitals deal is responsible for the fact that many patients, when they come to the hospitals, are chronic, and a re-establishment to health is impossible, but even these offer many medical problems. Take for example the cases of paresis. One out of every four men admitted to the Manhattan State Hospital is suffering from this disease. Although the treatment of paresis is at present carefully studied with a view to a possible radical cure, these studies have not gone far enough to allow us to assume that such attempts will be successful; therefore up to the present time the disease has to be looked upon as incurable and as leading to death in a few years. It is obvious that these

cases of paresis are physically as sick as any other cases with severe bodily diseases; therefore they need constant, careful medical attention and the most skillful nursing, and it is just as absurd to think that they can be treated in a wholesale fashion as it is absurd to think that patients with, let us say, cancer, can thus be dealt with. Mere custodial care is out of the question here; and even if the physician is playing a losing game in his grappling with the disease, the present-day spirit of humanity, an important asset of our civilization, will not be abandoned on that account, but everything that is necessary from a medical point of view must be done, and is done. This is only one disease. Other chronic patients, for example, those suffering from senile dementia, present the same medical and nursing problems, and even the patients in whom the physical sickness is not marked, but who present essentially a chronic mental change, a change in their attitude to life expressed in false ideas and hallucinations, are yet, each of them, cases who have to be guided by physicians who understand the disorders and who are able to conserve the mentality which is left.

But there are many cases in whom the prospect for recovery, or for great improvement, exists, and in them, above all, careful study is required, and it is here that the proper management is directly dependent on a careful investigation of the patient's sickness. In some, indeed, it is a question of life and death; in others, a question of quicker or slower re-establishment to health; in still others, a question of either getting back to their homes and to their work, or of having to be permanently kept in a hospital.

These are the obligations which a modern hospital must fulfill. In order to do this a well trained medical staff is required; a good system of administration, and an adequate equipment are necessary. Especially in regard to the last point, it is well to mention here that the overcrowding in our State hospitals is a serious menace to the proper care of patients. In the Manhattan State Hospital there are at present, in round numbers, 5,000 patients. But the hospital has provision only for 3,600. There are, therefore, 1,400 patients in the hospital for whom adequate provision in space has never been made. For example, in a ward especially devoted to patients who have to

be kept in bed, there are 148 patients, whereas there should be only eighty; in another ward in which chronic patients are housed, patients who need considerable attention however, it was necessary to place 128 beds instead of seventy-five, which is the certified capacity, and this ward moreover has to be used by the patients both day and night. It is not necessary to bring more examples. It is obvious that these are not only not ideal conditions, but conditions which should not exist in this State. In spite of these difficulties it has been possible as a result of the well-planned organization of State care of the insane, guided by the State Hospital Commission, to develop standards of care of which this State may well be proud.

To fulfill the task allotted to me I desire to describe here briefly the internal working of one of our State hospitals for mental diseases.

It is well, however, first to call attention to the improved method of caring for the patients prior to admission, as this is undoubtedly of great importance for the general treatment of the patients. The fact that the local health officers take charge of those who need care, or, as is the case in New York City and Brooklyn, that they are sent to special reception hospitals pending commitment, is a very important one. When the commitment is effected, the hospital is required by law to send a trained nurse or trained nurses to bring the patient to the hospital, and in many instances, even, a physician may take charge of this transfer. When this is compared with the old method of having the police or sheriff manage this stage of the situation, it is obvious what a great advance from the medical point of view has been made. It means that what formerly was a police problem, has now, as it should, become a purely medical problem.

When the patient enters the hospital, he finds himself in a ward specially adapted for the reception of patients, a ward which is planned along similar lines as are wards in general hospitals. This not only gives the best possible chance for a thorough examination of the patient, but serves to impress on the latter the idea that he is regarded as a sick person in need of medical treatment.

A preliminary examination is then made in order to deter-

mine the immediate needs of the patient. It is this which guides the physicians in their first steps of the treatment. But this having been done, a more exhaustive study of the case is made. This consists of a careful physical and mental examination, with a view to determine the nature, cause, and the development of the mental disease. In order to accomplish this, it is necessary not only to investigate the symptoms as they present themselves, but it is often necessary to obtain from every available source, information as to how the symptoms arose, under what circumstances they came into existence, what kind of a person the patient was before he broke down, what the hereditary influences were; or laboratory methods may be required to settle the question of the causation. This always means considerable work in each individual case, and when we remember that in the Manhattan State Hospital, 1,800 new patients are admitted each year, it is clear how large a problem this presents. It may here be added that all the results of this examination and study of the patient are put down in typewritten form, and there are thus collected records which are not only of value for further elucidation of scientific problems, but, above all, of great value as guides for directing an intelligent treatment of the patient. Each new patient, as soon as the mental and physical examinations have been completed, is brought before the hospital staff for consultation, so that diagnosis and treatment are based, not only on thorough study, but on discussion and consultation with others.

The indications for treatment may refer to the building up of the general health; to correcting or alleviating certain physical troubles; or the treatment required may be more in the direction of mental treatment, such as the creating of the right kind of influences to which the patient should be subjected, or the guidance of the patient out of his mental conflicts and toward a re-establishment of the right attitude toward life; but such a guidance must be based on a searching study of the patient's mental operations. Again, the indications for treatment may point essentially toward the arousing of interest in healthy pursuits and occupations. Not infrequently all these indications may be combined in a given case. Special treatment may be needed in the form of various kinds of hydrotherapy or electro-

therapy. Some physical defects may require the help of specialists, and consulting physicians who have occupied themselves with particular forms of disease can be called upon. An operating room is available if surgical interferences are needed. Moreover, if the patients are very disturbed, as is sometimes the case, special efforts are made to meet these symptoms. It may then be necessary to place the patient under observation by a special nurse, or in an open air camp, or he may be treated by the continued bath—all of which is adjusted or changed as the exigencies of the case require. Special wards are arranged for those who require, above all, physical nursing because they are suffering from severe bodily diseases. There are also wards for patients with mild symptoms, in which a great deal of liberty is allowed, and in which the environment is made more homelike. Other wards are reserved for chronic patients. One of the important measures in treatment, which should yet be mentioned and which is needed in acute and chronic cases, though with modifications according to the needs, is suitable occupation. Aside from certain occupations in the way of housework, which have for a long time been furnished by every hospital, classes are conducted in arts and crafts under the direction of special instructors, and these instructors also train the nurses so that the benefit of such occupations can be carried into the wards. Classes have also been instituted for the training of more deteriorated patients so that they may be brought back if possible to more normal habits. Classes in gymnastics, calisthenics and folk dancing, are also important factors in the treatment of patients.

It is obvious that the facilities for these various forms of treatment, as well as enough physicians to do the work and enough nurses, must be available. But in order to accomplish the tasks which the modern hospital for mental diseases has thus to fulfill, it is not enough to have enough physicians and enough nurses, but, above all, to have *good* physicians and *good* nurses. Since physicians and nurses can be trained for this work only in hospitals for mental diseases, and since the State takes care of practically all the patients with mental diseases, it is a most important duty of the State to *train* the physicians and the nurses. This training of physicians and nurses benefits

the patients directly, as well as indirectly. It benefits the patients directly because mental diseases follow principles which can not be understood by the ordinary physician without special training, and the study and the treatment of mental ailments can not be conducted by men not familiar with these principles, so that only those who have had adequate training are fit to do this work. The same may be said in regard to nursing. Nursing of mental cases makes demands which are different from those made on the general nurse, and, like every other special problem, requires specific training. If, therefore, the patients are to get the right kind of treatment by the State, the State has to train physicians and nurses.

But this training also benefits the patients indirectly. The more actual knowledge young physicians can acquire in our State hospitals, knowledge which represents a rounding out of their medical studies, and which broadens their view of disease; the more will the better type of physicians occupy themselves with the study and treatment of mental diseases. A hospital in which there is not a good medical spirit and no active work going on, is not the kind of place which attracts the best type of physician; and considering the difficult subject, the State needs the best physicians. The advances which have been made in the study of mental diseases, and the interest which medical educators begin to show in this field, are factors which are helping the State materially in still further advancing the care of those suffering from mental disorders; but this will only be the case if the State fully appreciates that the medical work of our State hospitals must be kept to a high standard of efficiency. It was with this aim in view that the State Hospital Commission created the Psychiatric Institute in this State, and it is interesting to know that this plan of creating a Psychiatric Institute has been followed by a number of other States in the Union. This institute is a place where physicians are trained in the understanding of the underlying principles of mental diseases. It established and keeps up the standards of medical work, and co-ordinates the work of the different hospitals. Another function of this institute, and also an important one, is that of research in mental disorders. The work of this institute has proved to be of the greatest value in

stimulating the interest of physicians in both the practical and scientific problems of mental diseases. The physicians of the various State hospitals are encouraged to visit the institute in order to discuss their problems with the director, so that it is evident that the influence of the Psychiatric Institute has been that of elevating the standards of medical care and treatment.

What we have said in regard to the physicians and their need for training can also be applied to the nurses. Aside from the fact that patients are better cared for by nurses who are trained for that type of work, it must also not be forgotten that the hospitals can expect to get a good type of men and women to take care of the sick only if it can offer something to them, that is, if it can be of value to them in their private nursing. It is for these reasons that in every hospital for mental diseases in this State there has been created a training school with a special superintendent of nurses.

We have followed the patient through his admission and his stay in the hospital. When the patient has improved to such an extent that it seems wise to give him a trial outside, it is the usual custom not to discharge the patient outright, but to grant him a parole. This means that the patient is still carried on the hospital records, and that he is asked to report at stated intervals so that the physician may keep in touch with his condition, and advise and prescribe as necessity arises. This system was developed on account of the special needs which the diseases with which we are dealing present. The one great problem with patients' friends is their desire to have the patient discharged as soon as he shows a slight improvement; they overlook the obvious fact that the return to the environment in which the breakdown occurred, and before convalescence is fully established, would be about the worst possible thing for the individual. For patients with no friends able to assist them, there was developed through the co-operation of the State Charities Aid Association, a system of after-care to see them through the critical weeks of their parole. This after-care committee was formed early in 1906, being the first organization of its kind in the United States. More recently the after-care work has been taken over by the hospital as a part of its social service. About a hundred cases a year are referred to its agent by the

Manhattan State Hospital. Employment is secured for about thirty each year. Supervision is continued until the patient is doing well and has become self-supporting. Where home conditions are unknown and are thought to be of a rather low standard, the agent makes a visit and reports her observations to the physician, who further advises her. Many cases referred to the after-care agent are turned over to existing relief organizations, and receive help in this way.

I do not wish to leave the subject of the standards of care in the State hospitals without speaking of the claims sometimes made that abuses of patients exist in these hospitals. What are the real facts? We must not forget that the people whom we employ to help us to take care of the patients are human, and as such, of course, may make mistakes. All we have said before in regard to the improvement in the nursing counteracts directly the occurrence of such mistakes, but it does not entirely exclude them. Therefore, a strict surveillance is necessary. It is obvious that patients may become injured on account of their own great excitement, at times, and then it is not always possible to keep them entirely free from such injuries. But the possibility is ever kept in mind that an attendant may have been unwise, negligent or directly rough and undisciplined. Therefore, any injury is at once reported to the physician in charge, and to the superintendent, and an investigation follows immediately. In this investigation not only attendants but intelligent patients on the ward are interviewed, and according to its results the attendant is dealt with. The facts of this inquiry, when important, are also reported to the State Hospital Commission, and to the board of managers; and if there is evidence that cruelty or abuse has taken place the matter is also referred to the legal authorities. That the hospitals welcome extensive inspection, and are open to the public, I think may be gathered from the fact that over 100,000 visits are made yearly to the Manhattan State Hospital by friends of the patients. It is a distinct policy of the hospital to encourage such visits, and it is directly in line with the medical aims of the hospital to do so. We want friends to visits the patients (1) because we need information concerning the development of the mental disease; (2) because it is important for the treatment of the patient that

a healthy, sensible co-operation be established between physician and family; and (3) because after the patient leaves it is necessary to modify as much as possible, according to the needs of the case, the home environment, and to pave the way for the social service and after-care.

In the further development of the hospitals, and in the maintaining of the present standards, these institutions need the support of the public. The public must feel, moreover, that the problems we are dealing with are not only medical problems, but social and economic ones, and the closer the association between hospital and public, the greater will be the success of the former.

It has been seen that the financial support which has been allowed to these hospitals has not been adequate for the housing of the patients, nor has it indeed been adequate for the growing demands of the broadening duties of the hospitals. Increased appropriations will, therefore, be needed to look after the increasing number of patients, and to remedy the neglect of former years. Nevertheless, this increasing outlay of money will be a saving in the end to the community as a whole. Early admissions will not only cut down the loss to the community of working capacity, but will make the hospital stay shorter; and the same may be expected from the greater efficiency of the hospital, and from the ever-growing activities in after-care and prevention.

Editorial

> Now, as it was plain to my father, that all souls were by nature equal,—and that the great difference between the most acute and the most obtuse understanding—was from no original sharpness or bluntness of one thinking substance above or below another,—but arose merely from the lucky or unlucky organization of the body, in that part where the soul principally took up her residence,—he had made it the subject of his enquiry to find out the identical place.
>
> Now, from the best accounts he had been able to get of this matter, he was satisfied it could not be where *Des Cartes* had fixed it, upon the top of the *pineal* gland of the brain; which, as he philosophized, formed

a cushion for her about the size of a marrow pea; tho', to speak the truth, as so many nerves did terminate all in that one place,—'twas no bad conjecture;—and my father had certainly fallen with that great philosopher plumb into the centre of the mistake, had it not been for my uncle *Toby*, who rescued him out of it, by a story he told him of a *Walloon* officer at the battle of *Landen*, who had one part of his brain shot away by a musket-ball,—and another part of it taken out after by a *French* surgeon; and after all, recovered, and did his duty very well without it.

If death, said my father, reasoning with himself, is nothing but the separation of the soul from the body; and if it is true that people can walk about and do their business without brains—then certes the soul does not inhabit there. Q. E. D.

As for that certain, very thin, subtle and very fragrant juice which *Coglionissimo Borri*, the great *Milanese* physician affirms, in a letter to *Bartholine*, to have discovered in the cellulae of the occipital parts of the cerebellum, and which he likewise affirms to be the principal seat of the reasonable soul (for you must know, in these latter and more enlightened ages, there are two souls in every man living,—the one, according to the great *Metheglingius*, being called the *Animus*, the other, the *Anima;*)—as for the opinion, I say, of *Borri*, —my father could never subscribe to it by any means; the very idea of so noble, so refined, so immaterial, and so exalted a being as the *Anima*, or even the *Animus*, taking up her residence, and sitting dabbling, like a tadpole all day long, both summer and winter, in a puddle,—or in a liquid of any kind, how thick or how thin soever, he would say, shocked his imagination; he would scarce give the doctrine a hearing.

What, therefore, seemed the least liable to objections of any, was that the chief sensorium, or head-quarters of the soul, and to which place all intelligences were referred, and from whence all her mandates were issued,—was in, or near, the cerebellum,—or rather somewhere about the *medulla oblongata*, wherein it was generally agreed by *Dutch* anatomists, that all the minute nerves from all the organs of the seven senses concentered, like streets and winding alleys, into a square.

LAURENCE STERNE.

The Life & Opinions of Tristram Shandy, Gentleman.

The Teaching of Physiology.

In the introductory address given at the opening of the first session of the Albany Medical College, November 12th, 1839, Dr. Thomas Hun urged the necessity upon the students of approaching their work with a scientific spirit. He drew the distinction between the art and the science of medicine, contrasted the empiric with the scientific practitioner, and emphasized the cultivated habit of the latter in deriving knowledge from the careful analysis of phenomena. "Nor is it in medicine alone the distinction is made between theoretical and practical men. In legislation, too, we hear men every day extolling themselves as practical men and sneering at theorists, as though the theorist did not found his theory on experience as well as the practical man. It would really seem to be the idea of these people that the more one thinks upon and studies out a subject, the less fit he is to be trusted with its arrangement." Dr. Hun was Professor of the "Institutes of Medicine," a term not now in use. It signified the "principles" upon which modern medicine was founded, and of which physiology was the basis, and it was conceded that the collateral sciences of chemistry and physics "were contributing daily to throw more light upon physiology." He pointed out the fundamental relations of physiology in the following terms, which constitute as it were a definition of physiology: "Modern science studies the phenomena of disease as presented in disorders of function, * * * seeks for the relations of these phenomena, and compares them with what occurs in a state of health."

Dr. Hun continued to lecture upon physiology until 1856, when he was succeeded by Dr. Howard Townsend as Professor of Physiology, which was the first recognition of this title of the chair. Dr. James E. Pomfret was professor of physiology from 1867 to 1869, Dr. John V. Lansing from 1869 to 1874, Dr. George T. Stevens for the course of 1875, and he was followed by Professor Harrison E. Webster of Union College, who lectured until 1880, when the work was taken up by Dr. Franklin Townsend.

During this early period the difficulties of practical demonstration in the teaching of this subject were unsurmountable. The necessary apparatus was not available in this country, and was

only used in research work in a few centres in Europe. Dr. Franklin Townsend, who was greatly admired by the students of his day for assisting them to practical work outside the regular duties of his professorship, broke down the traditions by demonstrating at the close of each year, phenomena of the circulation in the calf, as a summary of part of the work of his course. When he retired, a short time before his death, Dr. Hermann Bendell lectured upon physiology for a year, and the chair was then occupied by Dr. Hermon C. Gordinier, who relinquished it with an appeal for the establishment of a physiological laboratory, where the entire work of the course should be carried on by the students with proper apparatus and under the instruction of a full-timed physiologist.

This plan has been elaborated, and the instruction in this most important subject is now given by Charles M. Gruber, Ph. D., who devotes his entire time to this department of the College, and the research work incidental to it.

The course in physiology for the first year students in the Albany Medical College this year occupies the full forenoons six days in the week during the spring term.

Three of the four hours each morning are devoted to the experimental work, recitations and demonstrations. The laboratory has been supplied with sufficient apparatus for fifteen tables. This makes possible the dividing of the class into groups of two or three men. The smaller the groups of men working together the more each man is thrown upon his own resources to see and do for himself. Thus the student is enabled to learn not only the functions of the tissues and organs but to learn the methods of physiological technique as well. The remaining time is devoted to lectures and examinations.

From the clearest and most typical records obtained by the students in the laboratory lantern slides are made and presented for discussion during a period of one hour devoted each week to the clearing up of any difficulties which have presented themselves. A number of the most difficult experiments or experiments which require more complicated and expensive apparatus for their performance are given to the students in the form of demonstrations prepared by the teacher. There are about thirty of these.

Another one hour period each week is devoted to recitations upon the seventy or more lectures given by the teacher during the term and upon collateral reading which the students are required to do in standard texts.

Each student is required to make a review of some physiological subject approved by the teacher and to prepare a written résumé to be presented before the class. Or if he prefers he may assist in the working out of an original research. If the research is undertaken the student must determine from the literature what has already been done upon the work at hand. In the looking up of these subjects it is expected that each man acquaint himself with the original sources of medical literature. Such a knowledge will be invaluable to him in years to come. It will enable him to turn to the many papers—not only upon physiological but upon any medical subjects,—which have already been published and which are delivered from year to year at the various meetings of medical associations. Tuesday morning is allowed for reading on these subjects in the State Education Building or for further work in the laboratory.

Public Health

Edited by Arthur Sautter, M. D.

Department of Public Safety, Bureau of Health, Albany, N. Y.

Abstract of Vital Statistics, December, 1915.

Compiled by William F. Fullgraff, Registrar.

Deaths.

Consumption	22
Typhoid fever	0
Scarlet fever	0
Measles	1
Whooping cough	1
Diphtheria and croup	0
Grippe	5
Diarrheal diseases	7
Apoplexy	13
Pneumonia	14
Broncho-pneumonia	5
Bright's disease	9
Cancer	7

Accidents and violence	9
Deaths under one year	23
Deaths over seventy years	35
Total deaths	186
Death rate	19.90
Death rate less non-residents	17.98

Deaths in Institutions.	Resident.	Non-Resident.
Albany Hospital	6	15
County House	2	2
Dominican Convent	0	1
Home for Aged Men	1	1
Home for the Friendless	0	1
Homeopathic Hospital	2	11
Hospital for Incurables	1	1
Penitentiary	0	1
Public places	1	4
St. Margaret's House	1	2
St. Peter's Hospital	4	2
Maternity Hospital	0	5
Albany Hospital Camp	2	1
Births		146
Still births		8

Bureau of Communicable Disease.

Cases Reported.

Typhoid fever	1
Scarlet fever	8
Diphtheria and croup	13
Chickenpox	17
Measles	82
Whooping-cough	17
Tuberculosis	24
Mumps	15
Septic sore throat	4
Total	181

Number of days quarantine for diphtheria:
Longest..... 20 Shortest..... 6 Average..... 12 7/11
Number of days quarantine for scarlet fever:
Longest..... 36 Shortest..... 30 Average..... 32 4/8

Fumigations:			
Houses	84	Rooms	866
Milk bottles disinfected			271
Cases of diphtheria reported			13
Cases of diphtheria, antitoxin used			13
Deaths after use of antitoxin			6

Communicable Disease in Relation to Schools.

	D	S F.	M.
Public School No. 2	1	1	....
Public School No. 12	....	....	1
Public School No. 14	....	....	1
Public School No. 17	....	4	1
Public School No. 18	....	....	38
Public School No. 22	....	1	....
Miss Quinn's School	....	....	1
High School	....	....	12
Albany Female Academy	....	....	2
St. Agnes' School	....	....	1
Albany Law School	....	....	1
Holy Cross School	....	....	1
Christian Brothers' Academy	....	1	....
St. Joseph's Academy	1	....	....
St. Ann's School	....	....	11

TUBERCULOSIS.

Bender Laboratory Report on Tuberculosis.

Living cases on record December 1, 1915		462
Cases reported:		
By card	18	
Dead cases by certificate	4	
		22
Total		484
Dead cases previously reported	18	
Dead cases not previously reported	4	
Removed	3	
		25
Living cases on record January 1, 1916		459
Total tuberculosis death certificates filed during December		22
Non-resident deaths:		
Albany Hospital	2	
Albany Hospital Camp	1	
		3
Resident deaths		19

Report of Visiting Tuberculosis Nurse.

Old cases	5
New cases	19
Returned from hospitals	1
Total	25
Disposition of cases:	
Died	7
Sent to hospitals	2
To general tuberculosis nurse	16
Total	25
Visits made	23
Visits made, old cases	280
Calls at Board of Health office	26

Bureau of Plumbing, Drainage and Ventilation.

Inspections	214
Old houses	66
New houses	148
Iron drains	82
Connection street sewers	17
Tile drains	18
Urinals	8
Cesspools	76
Wash basins	91
Sinks	103
Bath tubs	90
Washtrays	86
Tank closets	129
Slop hoppers	4
Permits issued	69
Plumbing	60
Building	9
Plans submitted	35
Old buildings	5
New buildings	30
Houses tested	63
Blue or red	5
Peppermint	5
Water tests	53
Houses examined	34
Re-examined	48
Valid	18
Without cause	16

BUREAU OF PATHOLOGY.

Bender Laboratory Report on Diphtheria.

Initial positive	11
Initial negative	257
Release positive	3
Release negative	48
Suspicious	1
Total	320

Test of Sputum for Tuberculosis.

Positive	8
Negative	37
Total	45

Widal Tests.

Positive	2
Negative	21
Suspicious	2
Total	25
Wasserman tests	1
Milk analyses	38

BUREAU OF MARKETS AND MILK.

Public market inspections	17
Market inspections	90
Fish market inspections	6
Fish peddler inspections	1
Rendering plant inspections	2
Packing house inspections	2
Milk house inspections	4
Milk depots inspected	8
Dairies inspected	4
Stores inspected	146
Lactometer readings	44
Temperature readings	44
Fat tests	56
Sediment tests	68
Bacterial counts	55
Cows examined	92
Cows quarantined	1
Commission houses inspected	8
Complaints investigated	2

Miscellaneous.

Work certificates issued to children	19
Vaccinations	7
Cases assigned to health physicians	68
Calls made	129
Number of complaints of nuisances	44
Privy vaults	2
Closets	6
Plumbing	15
Other miscellaneous complaints	21
Number of dead animals removed	259
Garbage collected from 1st district, bbls	186
Garbage collected from 2nd district, bbls	206

Medical News

Edited by Arthur J. Bedell, M. D.

Albany Guild for the Care of the Sick—Department of Visiting Nurses—Statistics for December, 1915.—Number of new cases, 151; classified as follows: Dispensary patients receiving home care, 8; district cases reported by health physicians, 1; charity cases reported by other physicians, 49; moderate income patients, 70; metropolitan patients, 23; old cases still under treatment, 538; total number of cases under nursing care during month, 689. Classification of diseases for the new cases: medical, 30; surgical, 4; gynecological, 0; obstetrical under professional care—mothers, 36; infants, 39; eye and ear, 8; skin, 2; throat and nose, 0; dental, 0; infectious diseases in the medical list, 32; infectious diseases in the surgical list, 0. Disposition: Removed to hospitals, 11; deaths, 24; discharged cured, 74; discharged improved, 37; discharged unimproved, 3; number of patients still remaining under care, 540.

Special Obstetrical Department.—Number of obstetricians in charge of cases, 2; number of students in attendance, 3; number of nurses in attendance, 2; number of patients carried over from last month, 3; number of new patients during month, 3; number of patients discharged, 5; number of visits by head obstetrician, 0; number of visits by the attending obstetrician, 36; number of visits by students, 23; number of visits by nurses, 44; total number of visits for this department, 103.

Visits of Nurses (all departments).—Number of visits with nursing treatment, 1,431; for professional supervision of convalescents, 750; total number of visits, 2,181; pay visits, 693; charity visits, 738; unrecorded visits, 750; cases reported to the Guild by 1 health physician, and 44 other physicians, graduate nurses 7, certified nurses 2, pupil nurses 7 on duty.

Dispensary Report.—Number of clinics held, 85; number of new patients, 145; number of old patients, 403; total number of patients treated during month, 548. Classification of clinics held: surgical, 13; nose and throat, 8; eye and ear, 13; skin and genito-urinary, 8; medical, 12; lung, 6; dental, 0; nervous, 2; stomach, 4; children, 11; gynecological, 8.

Medical Society of the County of Albany.—The regular meeting of the Medical Society of the County of Albany was held at the Elks Club, Thursday, January 13, 1916, at 8.45 p. m.

Dr. Henry L. Elsner, Syracuse, N. Y., read a paper on "Some Facts Relating to Hyperthyroidea and Its Control."

Medical Society of the County of Schenectady.—The regular meeting of the Medical Society of the County of Schenectady was held in the rooms of the new County Building, Thursday, January 11, 1916, at 8. 30 p. m.

Dr. Wilson G. Smillie, Instructor in Preventive Medicine, Harvard Medical School, read a paper on "Septic Sore Throat."

Alumni Association of the Albany Medical College.—The Executive Committee of the Alumni Association met at the Albany Club, January 7, 1916. The affairs of the Association were discussed and preliminary plans made for the next annual meeting.

College Notes.—All college exercises were suspended from Thursday, December 23, 1915, to January 3, 1916, for the Christmas recess.

Dr. Wilson G. Smillie of the Department of Preventive Medicine, Harvard Medical School, Boston, Mass., conducted the public health course given to the second year class during the month of January. He received the cordial co-operation of the State and City Departments of Health and others interested in Public Health work. The entire time was devoted to public health lectures, laboratory and field work.

The mid-year examinations for the third and fourth year students began on January 24th and for the first and second year students on January 27th. The second half of the school year will begin on February 1st.

During the Christmas recess, Dr. Charles M. Gruber presented before the American Physiological Society at their meeting in Boston, a paper entitled "The Response of the Vaso-Motor Mechanism to Different Rates of Stimulation." This paper is important in conclusively proving that the rate of stimulation as well as the intensity is an important element in the response of the vaso-motor mechanism; for example, it is well-known that when the central end of a peripheral nerve such as the sciatic is stimulated it is accompanied by a sharp rise in blood pressure. Dr. Gruber has proved that stimulation of the same intensity

which would produce a rise in blood pressure may cause a distinct fall in the blood pressure if the rate of stimulation is altered.

The Critic and Guide.—*Physicians Drug News and Office Practitioner* has been acquired by the Critic and Guide Company and will be consolidated with *The Critic and Guide* beginning with January, 1916. The consolidated journal will remain under the editorship of Dr. William J. Robinson.

Association of Military Surgeons of the United States.—The Secretary of the Association of Military Surgeons of the United States and Editor of the Military Surgeon announces that the headquarters of the Association and of the Military Surgeon have been transferred from Chicago to Washington, D. C., and requests that hereafter all communications, periodicals for exchange, books for review, etc., be addressed to the newly-elected Secretary-Editor, Lt.-Col. Edward L. Munson, M. C., U. S. Army.

New York Health Almanac.—The January monthly bulletin of the New York State Department of Health has been issued in the form of a very attractive almanac. On one page a paragraph is devoted to the physical characteristics of the month and also deals with definite subjects like Fresh Air; Hygiene of the Diet; Pure Water Supply; Checking the Spread of Disease Germs; Getting Ahead of the Enemy; Keeping the Baby Well; Fighting the Fly; A Sanitary Milk Supply; Sound Minds in Sound Bodies; Immunity Against Disease; Alcohol a Race Poison; The Temple of Health.

The opposite page is of the orthodox almanac type including reference to certain health subjects.

The American Medical Association Elections Declared Illegal.—The Illinois Supreme Court affirmed the decision of the Appellate Court, handed down some time ago in the suit brought by Dr. G. Frank Lydston, that the election of the American Medical Association held outside the state of Illinois is illegal. The court has therefore ordered the issuance of a writ of mandamus directing the State Attorney of Cook County to bring quo warranto proceedings against the Association for the removal of the present officers.

Appropriation for Tuberculosis Hospital.—The Saratoga County Board of Supervisors has appropriated $17,000 for the county tuberculosis sanatorium. This is a reduction of more than $1,500 in the amount asked for by the institution, but is $5,000 more than the appropriation made last year.

Guarding Against Typhus.—Surgeon-General Rupert Blue, U. S. P. H. S., is taking great precautions against the introduction of typhus

fever through the Mexican border. Senior Surgeon Claude C. Pierce has been ordered from San Francisco to Laredo, Texas, where a quarantine against typhus has been established.

Decrease in Medical Books.—The annual report of the committee on library of the New York Academy of Medicine, issued January 1st, shows a great decrease in the average of medical books published in Europe in 1915. During 1913 the Academy received 704 French and German publications, but during 1915 only 435.

Memorial to Trudeau.—Announcement has been made of a fund established by Samuel Mather of Cleveland to found a school for the graduate study of tuberculosis as a memorial to the late Dr. Edward L. Trudeau. The school will probably be located at Saranac Lake, N. Y., and courses will be offered to physicians who wish to become proficient in the diagnosis of tuberculosis. Co-operating agencies for special study will be established in New York City.

The De Roaldes Prize.—The American Laryngological Association announces that the de Roaldes prize, a gold medal valued at $100, the object of which is to encourage the advancement of the sciences of laryngology and rhinology, is now open for competition to practitioners in regular standing in the United States and Canada, not members of the American Laryngological Association. Essays must be typewritten, the customary means being taken to prevent disclosure of the author's name. They must be placed in the hands of the secretary of the Association, Dr. Harmon Smith, 44 West Forty-Ninth Street, New York, prior to April 20, 1916.

Cancer Research.—The ninth semi-annual meeting of the American Association for Cancer Research was held at the New Ebbitt Hotel, Washington, D. C., January 5th, as a symposium on cancer research in conjunction with the Pan-American Scientific Congress.

Organization of Indian Service Physicians.—A general organization of the physicians of the United States Indian Medical Service is being perfected by several physicians of that service. Because of inadequate compensation, insufficient authority in medical and sanitary matters, absence of reasonable expectation of promotion and co-ordinate organization, the physicians of this service, through its association are planning an active campaign which will put the Indian Medical Service on a higher plane. The organization will ask for a chief medical officer whose authority in matters pertaining to his office is supreme; organization to be based on that of the higher government offices; increase in salary and rank which will be determined by length of service and efficiency. Former and active officers of the service are requested to correspond

with the Temporary Secretary, "Association of the U. S. Indian Medical Service," Shiprock, N. M., or the Treasurer of the Association at Crozier, N. M.

Belgian Scholarship Committee.—The Belgian Scholarship Committee has issued a circular letter of appeal for a fund to enable scholars, research workers, literary men and artists of Belgium to resume their work. It is proposed to give these worthy individuals assistance in England, Holland, France or wherever they may be, but in a few cases it is proposed to have the workers brought to this country. The committee has already received assurance from the George Washington University, Clark University and the State Universities of Missouri and Florida that they will give free tuition to Belgium students. Belgian professors have also been temporarily engaged by Princeton, George Washington, Harvard and Yale Universities and the Universities of Pennsylvania, Chicago and the Baltimore Branch of Carnegie Institute. In one of these the honorarium has been partly paid by the committee. The committee undertakes to centralize all information and to act as a clearing bureau between the educational institutions of the United States and the Belgian victims of the war. The committee appeals especially to men interested in the development and diffusion of knowledge and art and hopes that a liberal response will follow the appeal.

Typhus in Mexico.—Reports from Mexico state that following the famine, typhus has broken out and that its fatalities are particularly heavy on account of the impoverishment of the people and the filth conditions prevalent. It is reported at Pachuca that there are about seventy deaths a day and it is said that typhus is causing as many deaths as starvation in the suburbs of the city of Mexico.

Tuberculosis Patients and the Law.—The state law gives health departments power to enforce their mandates with reference to the care of tuberculous persons. Many afflicted with tuberculosis are not careful to comply with the measures necessary to prevent the spread of the disease to others. It has been necessary in some instances to enforce the regulations of health boards in this respect by application to the courts. Several such instances have occurred in Buffalo. Tuberculous patients who are refractory in this respect may even be sent to the penitentiary where special quarters are set aside for them.

Compensation for Federal Employees.—The American Association for Labor Legislation announces that the Kern-McGillicudy bill to provide just compensation for federal employees will be introduced into the new congress at an early day. This bill, which was reported favorably by the judiciary committee of the last congress and has been indorsed by the Federal Bureau of Labor Statistics, American Federation of Labor and other bodies, was drafted to supersede the law of 1908. Nearly three quarters of the half-million employees of the United States

are not entitled to any compensation whatever for injuries and moreover no injured workman can sue the national government for liability. In the present year, eight states have adopted the workman's compensation bill far in advance of the existing law for federal employees while two of the thirty-three states which have workman's compensation law have adopted liberal and progressive amendments.

THE AMERICAN AMBULANCE.—Ex-Ambassador Bacon, who went to France two months ago to inspect the work of the American Ambulance, returned to New York on December 28th. He reports that the cost of running the institution was $1,000 a day, which was much less than in the beginning, and that there are now 610 patients in the hospital at Neuilly and 500 others in beds hired outside.

TOOTH PASTE TAX.—The American Druggists' Syndicate is preparing petitions to be signed as a protest against the placing by Congress of an emergency tax on tooth paste. The petition says, "We submit that, instead of taxing tooth paste and toilet preparations which contribute to human cleanliness, human comfort and human health, the tax ought properly be paid by those who are making profits out of the war."

GOVERNOR APPROVES HEALTH BUDGET.—Governor Whitman has indorsed the work of State Health Commissioner Biggs and has approved of practically all of the requests for health extension work laid out by him for the coming year. The increased expenditures are largely in the departmental laboratories and for personal service. Dr. Biggs submitted requests for appropriations amounting to $626,525 as against $380,775 expended this year. It is planned to greatly increase the laboratory service. It is announced that free pneumonia serum will soon be available. The governor has also approved a request for a physician to make physical examinations of employees of the Civil Service Department.

UNITED STATES PUBLIC HEALTH SERVICE.—The annual report of the Secretary of the Treasury as it relates to the Public Health Service contains numerous recommendations bearing on the functions of that organization and evidences the great interest of this department in the extension and expansion of the governmental agencies for the protection of the public health.

In the development of general public health work, according to the Secretary, there is great need of additional medical officers. The number of requests for advice and assistance in health problems received from states and municipalities during the past year has far exceeded that in any similar period in the history of the Service, but the limited number of officers available for the work has prevented in many instances compliance with these requests.

The field investigations, the Secretary states, have served as a stimulus to state and local health agencies, and every effort should therefore be made to encourage and turn to practical account the interest in health matters awakened in the general public. For this reason an increase in the appropriation for field work is requested.

An additional building for the Hygienic Laboratory is urgently needed. The work of this institution has been greatly extended, particularly as it relates to the examination of viruses, serums and analogous products, a vast market for which has been recently created abroad. The safeguarding of these therapeutic agents requires great accuracy and precision and overcrowding is a serious handicap. In order that the public health may be better protected, an annual appropriation of $25,000 is recommended to be expended in carrying out the provisions of the law relating to the examination of these products.

The United States is the only government of importance which does not provide for the care and isolation of lepers. The establishment of a national leprosarium where the numerous lepers, most of whom are native born Americans, may be properly segregated and treated, thereby eliminating a menace to the health of others, is urged.

The further recommendations of the Secretary relate to the need of additional clerical assistance in order to meet the demands which are increasingly made on the Public Health Bureau.

The annual report of the Surgeon-General of the United States Public Health Service records the largest amount of work performed in the history of that organization. Since the passage of the law of 1912 the public health functions of the Service have materially broadened, thereby increasing greatly its usefulness to the American people. Throughout the report the economic importance of disease prevention is made apparent to the reader.

Perhaps the most important achievement of the year was the discovery that pellagra is a deprivation disease, resulting from a faulty diet containing an excess of carbo-hydrates. While the final experiments which led to this discovery have only recently been completed, the conclusion itself is the culmination of investigations extending over a period of seven years. The work has consisted of epidemiological field studies, actual feeding experiments conducted at numerous places in Georgia and Mississippi, and experimental research at Spartanburg, South Carolina, and other places.

A new national quarantine station was opened at Galveston, Texas, and the control of the Boston station was transferred to the Public Health Service. A great reduction in immigration has been observed during the year, with a corresponding increase in the number of aliens certified. At the port of New York, the percentage has risen from 2.29, previous to the development of the European conflict, to 5.37 since that time; this increase largely being due to the fact that with the decreased immigration more time can be devoted to the examination. The number of cases treated at Marine Hospitals and relief stations exceeded 55,000,

15,000 of which were hospital patients, a considerable increase over previous years. The Coast Guard Cutter "Androscoggin" was fitted out as a hospital ship and now affords relief to deep sea fishermen on the banks of Newfoundland.

On the occurrence of plague at New Orleans, the first outbreak upon the Gulf seaboard, the State and local health authorities requested the Public Health Service to take charge of the situation. Extensive rat-proofing and other anti-plague measures were undertaken, resulting in the eradication of the disease from among human beings and the practical extermination of the rodent infection.

Great reduction in the incidence of malaria was obtained in localities where surveys were conducted. Drainage projects, fish culture studies and the conditions surrounding the impounding of water for power purposes were investigated in order to eradicate as far as possible the disease in these areas. Scientific investigations of malarial infection showed that in the latitude of this country the most important agent in carrying the infection through the winter season is man, and not the infected, hibernating, Anopheles mosquitoes as was previously supposed. From the standpoint of prevention this is a discovery of considerable value.

Studies of occupational diseases and industrial hygiene were instituted at several places during the year. A survey of the industries of Cincinnati was made to determine the cause of the prevalence of tuberculosis among industrial workers. The investigations relating to the migration of persons suffering from tuberculosis were completed.

Upon the request of the health authorities of five states, the organization and operations of the respective boards of health were studied and recommendations advanced for improvement in the powers and duties of these bodies. The health organizations of several cities were likewise investigated.

Investigations of the pollution of streams and the examination of shellfish were also conducted.

Trachoma was combated in the Appalachian Mountains, where it is most prevalent, over 12,000 cases being treated. Surveys in certain states during the year showed that the disease is not an uncommon infection.

Rural sanitation work was conducted in six different states and everywhere resulted in the reduction of typhoid and other communicable diseases.

Public health laboratories for the prevention of the interstate spread of disease were established in Chicago, Seattle, and numerous other railway centers.

Additional duties have been imposed upon the Service by extension of relief benefits to the newly organized Coast Guard and the physical examination of seamen applying for the rating of "able seaman." For this reason, and because of the greatly increased health functions of the Service, an increase in the commissioned personnel is recommended. An additional building for the Hygienic Laboratory and the establish-

ment of a National Leprosarium for the proper segregation and care of cases of leprosy are also recommended.

Sanitation and Poverty.—The factor of poverty in sanitary problems was discussed in Washington, November 26th, by Surgeon-General William C. Gorgas, whose success in cleaning up Havana and the Panama canal zone have brought him recognition as America's leading sanitarian. His audience was the Clinical Society of Surgeons, assembled in their twenty-fourth annual meeting.

Work of American Ambulance.—During the first eleven months of its establishment the field service of the American ambulance in Paris has transported 57,000 wounded from the front. The number of automobiles now engaged in this service is about 90, with 20 more machines attached to the hospital at Neuilly. The cost per trip per wounded man runs from 10 cents to 60 cents, depending on the length of the run and the condition of the roads. One supply and one staff machine accompany each of the units in the field, themselves composed of from ten to twenty-five cars. There have been no deaths among the drivers of the field ambulance, although they penetrate very near to the lines and are frequently under heavy fire. Additional cars are added to the field equipment as the fund grows. The number of beds in the hospital at Neuilly has increased from 175 to 600. The per diem cost is $1.32 for each patient, which is not considered high, regard being had to the increased cost of all necessities and to the fact that all the patients are surgical.

Personals.—Dr. Morris B. Beecroft (A. M. C. '13), has resigned as first assistant at the Bender Laboratory and instructor at the Albany Medical College to accept a position as assistant to Dr. B. T. Terry in the Pathological Department of the Kings County Hospital, Brooklyn.

Died.—Dr. Warren P. Palmer (A. M. C. '80), Brooklyn, N. Y., died in the Prospect Heights Hospital, Brooklyn, January 7, 1916, from pneumonia, aged 58.

—Dr. Sanford Bassler (A. M. C. '96), died at his home in West Berne, N. Y., January 13, 1916, from Bright's disease, aged 51.

—Dr. Leonard K. Van Dyck (A. M. C. '15), senior medical interne in St. John's Hospital, Brooklyn, died in that institution December 30th, from pleuro-pneumonia.

In Memoriam

Warren B. Palmer, M. D.

Dr. Warren B. Palmer, a graduate of the Albany Medical College of the class of 1880, died at his home in Brooklyn, N. Y., on January 7, 1916, after a short illness with pneumonia.

Dr. Palmer was born at Keansburg, N. J., on December 21, 1857, a

son of Dr. William W. and Weltha Palmer. His preliminary education was obtained in Trenton, N. J., and after graduating from the Albany Medical College he began the practice of medicine in Brooklyn. He gave special attention to the diseases of the throat and ear. Dr. Palmer came of a family of physicians, among them being Dr. Judson Palmer and Dr. Howard Palmer of Brooklyn, and Dr. Charles Palmer of Homedel, N. J.

Dr. Palmer was a quiet and unostentatious practitioner who gave his time to his work and was not active in public affairs. He will be remembered by the students of his day in the college as an industrious, persistent worker, with appearance of strong physical health and endurance, so that his premature death is unexpected.

Eugene J. Gallagher, M. D.

Dr. Eugene J. Gallagher, a graduate of the Albany Medical College of the Class of 1892, died at his home in Yonkers, N. Y., on December 3, 1915, after an illness of about two weeks.

Dr. Gallagher was born in Monticello, N. Y., in 1869, and after graduating from the Albany Medical College served for two years as interne in St. Peter's Hospital. After this he removed to Kingston, where he held a position upon the staff of the City Hospital for twelve years, and served five years as police surgeon and three years as health officer. Afterward he removed to Yonkers, and has also been one of the district physicians of that city for the last six years. He was a district medical examiner for the Metropolitan Life Insurance Company, and member of the Medical Society of the State of New York and of the American Medical Association. He was also active in medical circles in Yonkers. He is survived by his wife, who was Miss Anna Kiernan of Boston, Mass., and two sisters.

Current Medical Literature

REVIEWS AND NOTICES OF BOOKS

Nervous and Mental Diseases. By Archibald Church, M. D., Professor of Nervous and Mental Diseases in Northwestern University Medical School, Chicago; and Frederick Peterson, M. D., formerly Professor of Psychiatry, Columbia University. Eighth edition, revised. Octavo volumes of 940 pages, with 350 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, $5 net; half morocco, $6.50 net.

The eighth edition of Church and Peterson sustains the high opinion which is represented by this great demand for publication. The book is entirely practical, and probably the most valuable and convenient work of reference on the subject of nervous and mental diseases in the library of the practicing physician.

In the present edition there has been no change in the section on mental diseases, which is commendable, as a great deal of the work in this department of medicine in the last few years has been an elaboration of the nomenclature and reclassification of hypothesis without much change in basic facts.

Dr. Church has added considerable on the section on infantile paralysis, a phrase which he uses in the preface but omits from the index. The revision of this chapter brings the subject up to date, and the infectious origin of the disease is emphasized.

Another important revision is that on the subject of syphilis of the nervous system. A great deal has been done in the last few years in the intensive treatment of the tertiary manifestations of this infection, although the results are still in doubt, and it is possible that disappointment may follow the expectations that have been held out. Dr. Church still insists upon the value of a distinction between the distinctive and parasyphilitic lesions, maintaining that the early parasitic activities are not identical with the secondary toxic or chemical changes arising from them.

The conservative and practical view of the author in the entire text of this volume is to be commended, and since the publication of Gower's there has appeared no more valuable work on the diseases of the nervous system.

Differential Diagnosis. Presented through an analysis of 317 cases. By Richard C. Cabot, M. D., Assistant Professor of Clinical Medicine, Harvard Medical School. Octavo of 709 pages, 254 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, $5.50; half morocco, $7.

This book is the companion volume to that published in 1911 and reviewed in the Annals, August, 1911, page 495. The plan of Dr. Cabot's book, founded upon the "case system" should prove of considerable practical value in helping to train medical students to think, to force them to adopt the active rather than the receptive mood. For the same reason it should fill a need as a method of graduate study by practitioners. By this method alone, however, it is doubtful if more than an elementary, even though practical, knowledge can be gained. The "leading symptoms" traced to their cause in volume II as a basis for differential diagnosis are abdominal and other tumors, vertigo, diarrhea, dyspepsia, hematemesis, glands, blood in the stool, swelling of the face, hemoptysis, edema of the legs, frequent micturition, polyuria, fainting, hoarseness, pallor, swelling of the arm, delirium, palpitation, arhythmia, tremor, ascites and abdominal enlargement. The great bulk of the book is made up of case histories with a discussion of these. There are also classified lists of the causes of various symptoms and signs enumerated as "leading symptoms," as indicated in an analysis of the cases from the records of the Massachusetts General Hospital.

T. O.

A Manual of the Practice of Medicine. By A. A. Stevens, A. M., M. D., Professor of Therapeutics and Clinical Medicine in the Woman's Medical College of Pennsylvania, Lecturer on Medicine in the University of Pennsylvania. Tenth edition, revised. 12mo. of 620 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1915. Flexible leather, $2.50 net.

The latest revision of this well known manual contains numerous changes in various sections to bring the book abreast of recent literature. The general excellent arrangement and attractive form has been retained. Although there is a tendency for teachers to frown upon medical manuals; if properly used, however, in conjunction with original articles and more extended textbooks such a manual often serves to correlate information gleaned from the clinic and special reading. T. C.

Alveolodental Pyorrhea. By Charles C. Bass, M. D., Professor of Experimental Medicine, and Foster M. Jones, M. D., Instructor in the Laboratories of Clinical Medicine at the Tulane University Medical College, New Orleans, La. Octavo volume of 107 pages, with 42 illustrations. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $2.50 net.

This small book is a monograph treating the subject of pyorrhea alveolaris or as the authors term it "alveolar-dental pyorrhea" in the light of recent research. It is considered by them as proved that the affection is due to endamoeba buccalis as the specific cause. Many believe, however, that this is not proved, that the organism may be merely a secondary invader. Some tend to exaggerate the importance of the smaller or larger suppurative conditions of the mouth as a cause of systemic infection. Pyorrhea is not only important in this relation but its local affect on the teeth and indirectly in the general health of the individual. The authors are firm believers in the great therapeutic, even curative, value of emetin in this affection. W. C.

Cancer: Its Cause and Treatment. By L. Duncan Bulkley, A. M., M. D., Senior Physician, the New York Skin and Cancer Hospital. 8vo., cloth, 224 pages. Price $1.50 net, postpaid. Paul B. Hoeber, Medical Publisher, 67-69 East 59th Street, New York.

The book resembles in many respects those of certain English authors. Data which may be favorable to a pre-conceived view is presented. Dr. Bulkley believes in the "constitutional nature" of cancer and thinks that benefit is obtained by a diet carefully prepared with a daily intake of about 2,100 calories and containing a minimum of protein in vegetable form. He advocates this as a rational prophylactic method for avoiding cancer also for use after operation to avoid recurrence. It would seem that he is unable to prove his contentions. T. C.

The Principles of Pathologic Histology. By Frank B. Mallory, M. D., Associate Professor of Pathology, Harvard Medical School and Pathologist to the Boston City Hospital. Octavo of 677 pages, with 497 figures containing 683 illustrations, 124 in colors. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, $5.50 net.

This book by Dr. Mallory fills a great need in the pathology of to-day. There has been a tendency to belittle the morphological point of view as the chemical and physiological aspects have been developed. While it is realized that advance in pathological chemistry and physiology may be still in its infancy and capable of great extension it is equally important not to lose sight of the interpretation of function in a study of histological detail and of the histogenesis of microscopic lesions. This necessary correlation is now well recognized by the foremost anatomists. Dr. Mallory's book has been criticised as being incomplete. It has been said that many subjects are not considered or are merely touched upon. No pretense is made, however, by the author of discussing all the subjects usually included under the term "pathology." This book is based on Dr. Mallory's personal work on material collected at the Boston City Hospital in the Pathological Department for the past sixteen years. The illustrations are excellent photomicrographs taken by Dr. Mallory himself and the drawings made by an artist under his direction. In these days of compilation it is refreshing to have such an original book. It will be particularly valuable to medical students and research workers. T. O.

Pathological Technique. Including Directions for the Performance of Autopsies and for Clinical Diagnosis by Laboratory Methods. By F. B. Mallory, M. D., Associate Professor of Pathology, Harvard Medical School; and J. H. Wright, M. D., Pathologist to the Massachusets General Hospital. Sixth edition, revised and enlarged. Octavo of 536 pages with 174 illustrations. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $3.00.

In this sixth edition of the well known laboratory guide the general excellent form and arrangement is retained. It is with a feeling of confidence that one opens this book for it is well known that the authors add new methods and tests only after their value has been determined after the test of time. Several more recent staining methods have been added and newer methods in clinical pathology such as the fixation test for gonorrhea and echinococcus cyst, Lange's colloidal gold test, etc. The book is not a compendium including many worthless technique methods but presents a limited number of the more useful and reliable methods. T. O.

Pyelography (Pyelo-Ureterography) a Study of the Normal and Pathologic Anatomy of the Renal Pelves and Ureter. By WILLIAM F. BRAASCH, M. D., Mayo Clinic, Rochester, Minn. Octavo volume of 253 pages, containing 201 pyelograms. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $5.00 net.

Pyelography is now known to be a valuable aid in the diagnosis of kidney and ureteral conditions. The first attempts to visualize the urinary tract by means of the X ray were made as early as 1897 but it is only within the last few years that a satisfactory technic has been developed and the results have justified its use. It must be admitted, however, that the ideal injection medium has not yet been discovered and the employment of pyelography as an aid to diagnosis can not be said to be entirely free from danger to the patient.

Dr. Braasch, in connection with the Mayo Clinics, has had an opportunity to test the efficiency of pyelography in a large number of cases. In 1913 he reported a series of over 1,000 pyelograms made without serious results to any patient. He summarises the conditions in which this method of diagnosis has been of value as follows: (1) normal pelves, (2) hydronephrosis; (3) pyelitis; (4) pyonephrosis; (5) renal tuberculosis; (6) renal tumor; (7) renal and ureteral anomalies; (8) movable kidney and polycystic kidney; (9) identification of renal shadows; (10) localization of renal shadows; (11) identification of ureteral obstruction; and (12) as an aid to ascertain renal function.

"Pyelography" is a most interesting and instructive book and a valuable contribution to medical literature. J. M. B.

What to Eat and Why. By G. CARROLL SMITH, M. D., of Boston, Mass. Second edition, thoroughly revised. Octavo of 377 pages. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $2.50 net.

In this second edition new chapters on exercise and rheumatism have been added, also numerous changes have been made in the revision of the rest of the text. It would seem that various diseases had been described separately in which treatment, as regards dietetics, is almost identical. The first edition was reviewed in the ANNALS, 1911, Vol. 33, page 690.

The general attractive form and arrangement of the book has been retained. Frequent headings in heavy faced type are placed in the margin and are a great aid for rapid reference. The clear type on unglazed paper is not fatiguing but pleasing to the eye. As a simple work on practical dietetics, this book should be useful to students and practitioners.

T. O.

Diarrheal, Inflammatory, Obstructive and Parasitic Diseases of the Gastro-Intestinal Tract. By SAMUEL GOODWIN GANT, M. D., LL.D., Professor of Diseases of the Colon, Sigmoid Flexure, Rectum and Anus at the New York Post-Graduate Medical School and Hospital. Illustrated, 181 text figures, pages 604. Philadelphia and London: W. B. Saunders Co., 1915.

This book is along lines similar to the author's previous work on constipation and intestinal obstruction. It is a very complete yet practical treatise covering the etiology, pathology, symptoms, diagnosis and treatment of acute and chronic diarrhea and allied affections as well as diseases due to gastro-intestinal parasites. Considerable attention is devoted to the author's methods of irrigating the colon by both medical and surgical measures.

The book is very useful in supplementing the general text books. The illustrations are excellent. T. O.

A Text-book of Pathology. By ALFRED STENGEL, M. D., Professor of Medicine, University of Pennsylvania, and HERBERT FOX, M. D., Director of the Pepper Laboratory of Clinical Medicine, University of Pennsylvania. Sixth edition, reset. Octavo of 1,045 pages, with 468 text-illustrations, many in colors, and 15 colored plates. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $6.00 net, half morocco, $7.50 net.

In this sixth edition, the general form of previous editions has been retained although many new illustrations have been added. The review has been accomplished in collaboration with Dr. Herbert Fox and appears under joint authorship. A separate chapter is devoted to the pathology of the glands of internal secretion and new sections added on the pathology of the eye, ear and skin. The chapter on technique has been omitted. In describing the pathology due to the Bordet-Gangon bacillus of whooping cough it is stated that this organism, according to Wright, is situated between the cilia of bronchial epithelium and interfere with their movements, that efforts to remove it cause the prolonged coughing attacks. This observation and this hypothesis of the cause of the paroxysmal cough should be credited to the research of Mallory.

As in the past, this book will be found useful as a text-book for medical students. T. O.

Tuberculosis: Playing the Lone Game. Consumption. By THOMAS CRAWFORD GALCREATH, author of "Chasing the Cure in Colorado." Journal of the Outdoor Life Publishing Co., 289 Fourth Ave., New York City, 1915.

This book is a small paper covered volume of 74 pages. The author, who is a sufferer from tuberculosis tells, in a simple and interesting manner, of his eleven years' experience, of the failures and successes in his fight against tuberculosis. He makes many valuable suggestions by which other sufferers may benefit and he gives not only the "don'ts"

but also emphasizes the "do's." The book should be very helpful to one suffering from tuberculosis; it should also be an inspiration because of the courage and hope which the author has himself shown. T. O.

A Synopsis of Medical Treatment. By GEORGE CHEEVER SHATTUCK, M. D., Assistant Physician to the Massachusetts General Hospital. Second edition, revised and enlarged. Boston: W. M. Leonard, Publisher, 1915.

This small book of 185 pages is a valuable addition to the medical student's armamentarium. In concise form the general principles of medical treatment are clearly described. The text includes the treatment of cardiac insufficiency, nephritis, acute infectious diseases, gastric and duodenal ulcer and their complications. A synopsis of the description of important drugs and a list of valuable drugs is added, including indications for their use.

This book may be heartily recommended to third and fourth year medical students as well as to practitioners. T. O.

Potter's Compend of Human Anatomy. Revised by D. GREGG METHANY, M. D., L. R. C. P. and S. (Edinburgh), L. F. P. S. (Glasgow), Associate in Anatomy, Jefferson Medical College, Philadelphia. Eighth edition with 139 illustrations, also numerous tables and 16 plates of arteries and nerves. Philadelphia: P. Blakiston's Sons & Co.

The general form of the book in this familiar quiz compend series is retained, but numerous changes in description and nomenclature have been necessitated in revision. T. O.

International Clinics. A quarterly of illustrated clinical lectures and especially prepared original articles on Treatment, Medicine, Surgery and the Specialties, by leading members of the medical profession throughout the world. Edited by HENRY W. CATTELL, M. D., Philadelphia, and others. Volume I. Twenty-fifth series, 1915. J. B. Lippincott Company, Philadelphia and London. The price of this book is $2.00.

This volume contains the usual number of interesting and instructive articles for which the "Clinics" are noted and also a large section devoted to the "Progress of Medicine during the year 1914."

However, there are two essays worthy of special note, as they differ from the average run of medical communications. The writer refers to the two reports of visits to the clinics of Drs. McCrae and Murphy.

From the pen of Dr. E. J. G. Beardsley of Philadelphia we learn of the splendid work done by Prof. Thomas McCrae of the Jefferson Medical College Hospital of his thorough methods in physical examination and of his forceful, authoritative manner of teaching, also a synopsis of the cases presented at the medical clinic.

Turning from the medical to the surgical world, Dr. P. G. Skillem, Jr., of Philadelphia gives us a graphic description of the clinical work of that prince of teachers, John B. Murphy, at the Mercy Hospital of Chi-

cago. The essay is accompanied by a most excellent portrait of Dr. Murphy.

The two articles cited above are broadening in their effect upon the reader, giving him an insight of the work being carried on daily in our American Hospitals by men who are world leaders in their special fields. They lift one out of the narrow routine of our provincialism and inspire us with higher and nobler ideals both in the science of medicine and the art of teaching. H. D. C.

PATHOLOGY AND BACTERIOLOGY

Edited by Ellis Kellert, M. D.

The Lymphocyte in Natural and Induced Resistance to Transplanted Cancer. (Studies in Lymphoid Activity.)

James B. Murphy and John J. Morton. *Journal of Experimental Medicine, August* 1, 1915, *P.* 204.

In previous experiments, Murphy showed that resistance to foreign tissue grafts depended on the activity of the lymphocyte. Chick embryos which did not resist the growth of grafted tissues could be made to do so by the introduction of tissue containing numerous lymphoid elements, such as spleen and bone marrow. Animals deprived of their lymphoid tissue by means of X-rays could not resist the growth of foreign tissues. There is a marked histological resemblance between the failing heteroplastic graft in the foreign host and the cancer graft in the immune animal. In both there is found in the tissues about the graft, numerous small round cells. These elements are absent about the growing cancer graft in a susceptible animal.

After inoculation of cancer into an immunized animal, an immediate increase in the circulating lymphocytes was noted. This has been as high as 25,000 cells. In susceptible animals the lymphocytes are decreased. In cases where the tumor growth was retarded only a slight increase in the lymphocytes appeared.

Repeated doses of X-ray destroy the major portion of the lymphoid system of the mouse without injuring the other tissues. Mice were immunized by injections of defibrinated mouse blood and exposed to the X-rays after being inoculated with cancer. The tumors grew much more rapidly than in the unexposed animals.

A series of 20 rats were selected and 10 of them exposed on 12 successive days to X-ray and then all 20 inoculated with Jensen rat sarcoma. In the ten untreated animals, only two developed tumors, while in the remaining rats all developed large tumors which caused death. In a similar experiment in which the Flexner-Jobling carcinoma of the rat and yet another series of mice in which mouse carcinoma was used, the X-rayed animals developed a much higher percentage of takes than the animals not exposed.

The results of these experiments indicate that a marked lymphocytosis appears after inoculation with cancer. The resistant state is abolished when the lymphocytosis is prevented. This accounts for the fact that splenectomized animals are more susceptible to cancer than normal ones.

E. K.

THE MODERN TREATMENT OF PNEUMONIA.

Clinical reports show that the average duration and mortality are materially reduced by the use of

PNEUMONIA PHYLACOGEN

if administered early in the disease.

Pneumonia Phylacogen is supplied in 10-Cc. glass bulbs.

Literature accompanies each package; or it will be sent to any physician on receipt of request.

PARKE, DAVIS & CO.

DETROIT, MICHIGAN.

SYRUPUS HYPOPHOSPHITUM FELLOWS

One of the most efficient, most complete, and best all-round Tonics in the Materia Medica!

For four and a half decades its reputation has been constantly increasing!

Reject < Cheap and Inefficient Substitutes
Preparations "Just as Good"

THE FELLOWS MEDICAL MANFG. CO. LTD.
26 CHRISTOPHER ST.
NEW YORK

The Bender Hygienic Laboratory

ALBANY, N. Y.

TRUSTEES

HARRY H. BENDER
DR. GEORGE E. GORHAM
DR. HENRY HUN
DR. EDGAR A. VANDER VEER
WILLARD M. DOUGLAS
JAMES B. McEWAN, JR.

STAFF

ELLIS KELLERT, M. D., Director
MORRIS B. BEECROFT, M. D.
GEORGE V. GENZMER, M. D.

The attention of physicians is called to the advantages which this institution offers in methods of laboratory diagnosis. Many physicians, through lack of time, technical training, or proper laboratory equipment, find it difficult to utilize the many methods of microscopical and chemical examination, so essential to proper diagnosis. To the Alumni of the Albany Medical School, and to physicians generally, the Bender Laboratory offers at a moderate cost, facilities for such examinations. Animal inoculation, chemical, bacteriological and histological examinations will be made as the case requires.

The following directions are appended for the benefit of those who may forward material:

All specimens should be accompanied by a brief note of the clinical condition and a special reference to the character of the examination desired. Name and address of person to whom report is to be sent should be clearly indicated.

1.—Pathological material from either operation or autopsy should be wrapped in moist gauze surrounded by oiled paper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours, it should be placed in alcohol (80%) or formalin solution (10%). Small fragments of tissue and the material from uterine curettage should always be so preserved.

2.—Sputum should be sent in clean wide-mouth bottles; the ordinary vaseline bottle answers all purposes. The same bottle is suitable for faeces. Urine should be in clean bottles containing not less than six ounces.

3.—Exudates and other material requiring a bacteriological examination by culture should be placed in containers previously sterilized by heat (not chemical disinfectants).

4.—Outfits for special purposes, as diphtheria cultures, Widal reaction, vaccines, Wassermann reactions, etc., will be sent upon application.

5.—Tissues and fluids for animal inoculation, e. g., hydrophobia, tetanus, tuberculosis, etc., are best sent packed in ice. In cases of suspected hydrophobia it is advisable to send the entire animal without injury to the brain or cord.

6.—Haematological examinations at the patient's home will be made by appointment.

7.—Milk and water for bacteriological examination should be sent in sterile glass containers, packed in ice. Special instructions for the collection of samples may be had upon application.

8.—Members of the staff are at all times available for the purpose of conducting post-mortem examinations.

9.—The fee for complete haematological examination at patient's home is $10.00; for post-mortem examination, according to the nature of the case and the time consumed; for the Wassermann reaction, $10.00; all other examinations, a uniform fee of $5.00. A special contract may be made for weekly or monthly examinations of milk. In the case of patients who cannot pay the full amount, these fees will be reduced.

Reports will be sent by telegraph if requested.

Letters and specimens should be addressed to

THE BENDER HYGIENIC LABORATORY,
LAKE AVENUE, ALBANY, N. Y.

ALBANY HOSPITAL

New Scotland Avenue

MEDICAL AND SURGICAL STAFF

Consulting Obstetrician
JAMES P. BOYD, M. D.

Consulting Ophthalmologists and Otologists
CYRUS S. MERRILL, M. D.
HERMAN BENDELL, M. D.

Consulting Physicians
HENRY HUN, M. D.
JOSEPH D. CRAIG, M. D.

Attending Physician
THOMAS ORDWAY, M. D.

Attending Physicians
(Tuberculosis Department)
HOWARD VAN RENSSELAER, M. D.
ERASTUS CORNING, M. D.
MALCOLM DOUGLAS, M. D.

Electro-Therapeutists
EZRA A. BARTLETT, M. D.
WILLIAM G. LEWI, M. D. (Associate)

Psychiatrist
J. MONTGOMERY MOSHER, M. D.

Gastro-Enterologist
LEO H. NEUMAN, M. D.

Neurologist
LASALLE ARCHAMBAULT, M. D.

Dentist
LEROY BLATNER, D. D. S.

Pathologist
ELLIS KELLERT, M. D.

Assistant Attending Physicians
ANDREW MACFARLANE, M. D.
CLINTON B. HAWN, M. D.
L. WHITTINGTON GORHAM, M. D.

Assistant Attending Dermatologists
(Contagious Diseases)
ARTHUR SAUTTER, M. D.
CHARLES K. WINNE, JR., M. D.

Pathological House Officer
GEORGE V. GENZMER, M. D.

Resident Physicians and Surgeons
JOHN L. EDWARDS, M. D. (Chief Resident)
GERALD E. DAILEY, M. D.
ARTHUR M. DICKINSON, M. D.
LAWRENCE J. EARLY, M. D.
JOHN E. HESLIN, M. D.
JAMES S. LYONS, M. D.
BYRON G. SHULTS, M. D.
CHARLES W. TOMLINSON, M. D.
WILLIAM B. D. VAN AUKEN, M. D.
HERBERT A. VOGEL, M. D.

Surgeon-in-Chief
ALBERT VANDER VEER, M. D.

Consulting Surgeon
SAMUEL R. MORROW, M. D.

Attending Surgeons
EDGAR VANDER VEER, M. D.
ARTHUR W. ELTING, M. D.

Gynecologists
JAMES P. BOYD, M. D.
JOHN A. SAMPSON, M. D.

Rhinologist and Laryngologist
ARTHUR G. ROOT, M. D.

Dermatologists
FREDERIC C. CURTIS, M. D.
ARTHUR SAUTTER, M. D.
(Contagious and Venereal Diseases)

Ophthalmologist and Otologist
ARTHUR J. BEDELL, M. D.

Obstetricians
G. EMORY LOCHNER, M. D.
H. JUDSON LIPES, M. D.
PAUL T. HARPER, M. D.

Orthopedist and Radiographer
JOHN M. BERRY, M. D.

Urologist (Surgical for Men)
JAMES N. VANDER VEER, M. D.

Assistant Attending Surgeons
ALVAH H. TRAVER, M. D.
WILLIAM D. ALLEN, M. D.
J. LEWI DONHAUSER, M. D.

Assistant Attending Ophthalmologist and Otologist
CHARLES H. MOORE, M. D.

Assistant Attending Laryngologists
(Tuberculosis Department)
WILLIAM G. KEENS, M. D.
EUGENE E. HINMAN, M. D.

Assistant Attending Gynecologist
TIFFANY LAWYER, M. D.

Assistant Attending Urologist
(Surgical for Men)
WILLIAM D. ALDRICH, M. D.

Assistant Attending Radiographer
WILLIAM P. HOWARD, M. D.

Dispensary Physicians and Surgeons

WILLIAM D. ALDRICH, M. D.
ARTHUR J. BEDELL, M. D.
J. LEWI BENDELL, M. D.
BRANSON K. DEVOE, M. D.
L. WHITTINGTON GORHAM, M. D.
CLINTON B. HAWN, M. D.
WILLIAM G. KEENS, M. D.
JOSEPH A. LANAHAN, M. D.
TIFFANY LAWYER, M. D.
WILLIAM G. LEWI, M. D.
CHARLES H. MOORE, M. D.
J. MONTGOMERY MOSHER, M. D.
HENRY L. K. SHAW, M. D.

Pharmacist
CHARLES SCHAEFER, PH. G.

Superintendent
HAROLD C. GOODWIN, M. D.

Superintendent of Nurses
MISS SUSAN C. HEARLE

The Brandow Printing Co.
Albany, N. Y.